

ENGAGING YOUTH IN COMMUNITY FORESTRY:

LESSONS FROM OAXACA, MEXICO

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By

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Abstract

Environmental or natural resource commons typically involve a group or community of users managing shared resources through collective action and jointly-held rules and norms. Studies show that governing such resources as commons can provide livelihood and an important level of control or autonomy to the people who depend upon such resources. Community forests are one example. In Mexico, most forests are managed by Indigenous and local communities. As well as generating economic, social and environmental benefits at the local level, the country's community-managed forests also contribute to regional and global biodiversity and carbon sequestration goals. Yet, community forestry is challenging. In recent years, timber production in Mexico has fallen, and “owner” communities have been impacted by shrinking and aging resident populations. Some have struggled to maintain a broad and often diverse membership invested in local forest management. This includes youth, who can provide energy and ideas, take up governance responsibilities and forest work, but may have alternative livelihood options open to them. The role of youth has been underreported in the commons and (broader) environmental governance literatures.

In this research, I document and explore the perspectives, and current and potential roles, of youth with regards to their communities, key community institutions, and forest work and governance. I also reflect on strategies that communities might adopt to enhance youth integration in these arrangements and structures. I conducted qualitative, case study research in Oaxaca, southern Mexico, a region known for its extensive commons regimes and success in community forest management. I engaged youth from two specific communities – one located close to a major urban centre, one further away – as well as community leaderships and “outside” experts supporting Oaxaca's community forestry sector.

I found that most youth remain attached to their home village, territory and forests, but exhibit work and study aspirations that can be poorly matched to local employment opportunities and community membership expectations. While youth value communal territories and forests, they doubt whether community forestry will provide a meaningful livelihood. Although communities have made efforts to integrate youth into community forestry, strategies have rarely been co-designed (with youth) and success to date has been limited. The potential for youth integration was highest in the community located close to Oaxaca City, suggesting the importance of rural-

urban linkages to young people. These findings provide communities, scholars, and practitioners with important insights about the need and strategies for youth engagement and empowerment, and the broader implications for community and forest futures.

Keywords: *Community development, community forestry, commons, institutions, Mexico, Oaxaca, youth, youth engagement*

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Table of Contents

<i>Permission to Use</i>	<i>i</i>
<i>Abstract</i>	<i>ii</i>
<i>Acknowledgements</i>	<i>iv</i>
<i>Table of Contents</i>	<i>vi</i>
<i>List of Tables</i>	<i>ix</i>
<i>List of Figures</i>	<i>x</i>
<i>List of Plates</i>	<i>xi</i>
Chapter One: Introduction	1
1.1 Research Purpose and Objectives	2
1.2 Study Region and Communities.....	3
1.3 Research Significance	3
Chapter Two: Literature Review	4
2.1 Introduction	4
2.2 Environmental Governance	4
2.2.1 Definition and modes of environmental governance (EG)	4
2.2.2 What constitutes good EG?.....	6
2.2.3 Community-based environmental governance.....	7
2.3 Commons and Commons Theory	8
2.3.1 Constructing an alternative to Hardin’s tragedy argument	9
2.3.2 Commons institutions	10
2.4 Community Forestry in Mexico.....	11
2.4.1 Mexican community forestry in the context of rural change	13
2.5 Youth, Commons, and Community Development.....	14
2.5.1 Role of youth in environmental governance and stewardship	14
2.5.2 Youth and rural commons in Mexico.....	15
2.5.3 Youth as agents of change in community development.....	16
Chapter Three: Methodology	18
3.1 Researcher Background.....	18
3.2 Methodological Approach.....	18
3.2.1 Case study strategy of inquiry.....	18
3.2.2 Study region and communities	19
3.2.3 Selection criteria	20
3.2.4 Community engagement	21
3.3. Data Collection Methods	22
3.3.1 Interviews and interview participants.....	22
3.3.2 Methods for Objective 1	23

3.3.3 Methods for Objective 2	24
3.3.4 Methods for Objective 3	24
3.4 Coding and Analysis.....	25
3.5 Limitations to Research	26
Chapter Four: Results	27
Youth and Community.....	27
4.1 Youth-held Aspirations.....	28
4.1.1 Youth and study	28
4.1.2 Youth and work.....	30
4.1.3 Youth, migration, and mobility	32
4.1.4 Congruence between youth-held aspirations and parents' perspectives	34
4.2 Youth and Community Institutions	36
4.2.1 Youth participation in cargos	37
4.2.2 Youth participation in community assemblies	40
4.2.3 Do youth feel represented at a community level?.....	41
4.2.4 Changes that youth would like to see in their communities	46
4.3 Youth and Forests.....	48
4.3.1 Youth-forest connections.....	48
4.4 Chapter Summary.....	52
Chapter Five: Results.....	54
A Role for Youth in Community Forestry?.....	54
5.1 Youth-held Interest in Forest-related Work and Livelihoods	55
5.1.1 Youth interest in forestry activities	55
5.1.2 Youth-held ideas for forest-related projects and initiatives	58
5.1.3 Perspectives from community leaders and community forestry practitioners	61
5.2 Current and Planned strategies to Enhance Youth Engagement.....	63
5.2.1 Strategies to-date	63
5.2.2 More to be done	68
5.2.3 Barriers to Youth Participation in Community Forestry.....	73
5.3 Future Trajectories.....	74
5.4 Chapter Summary.....	77
Chapter Six: Discussion	79
6.1 Trends in Youth Mobility and Migration.....	79
6.1.1 The differentiated nature of rural-urban linkages.....	83
6.1.2 Rural-urban linkages and local economies	84
6.2 Cultural Barriers and Institutional Change.....	86
6.2.1 Institutional Change (will youth engage in the commons under current arrangements?)	86
6.2.2 Institutional flexibility	87
6.2.3 Change takes time	88
6.2.4 Change in community-based enterprise structures	89
6.3 Youth Engagement in Community Forestry	90
6.3.1 Making forest work meaningful for young people	92
6.3.2 Government-sponsored policy and program support.....	94

<i>Chapter Seven: Conclusions</i>	95
7.1 Key Lessons by Research Objective	95
7.1.1 Objective 1	95
7.1.2 Objective 2	96
7.1.3 Objective 3	97
7.2 Contributions of the thesis	98
7.3 Future research directions for a COVID-19 and post-COVID-19 world	99
<i>References</i>	103
<i>Appendix A. Interview scripts / focus group Questions</i>	116
Individual interviews with youth (14-29)	116
Individual interviews with adult community members (30 years and older)	117
Individual interviews with key informants working in the community's forest sector ...	118
Group interviews with community leaderships	118
Focus group (youth).....	119
Focus groups (adult women, adult men).....	120
Community workshop.....	120
<i>Appendix B. Example consent form (interviews with community members)</i>	121
<i>Appendix C. Statement of intent for Jalapa del Valle</i>	125
<i>Appendix D. Statement of intent for San Juan Evangelista Analco</i>	126

List of Tables

Table 2.1 Generic Models of Governance in Environmental Policy	5
Table 3.1 Summary of data collection methods by research objective	22
Table 3.2 Numbers of interview and types of participant	23
Table 4.1 What youth like most about local forests	48
Table 4.2 Why are forests important?	50
Table 5.1 Forest-related project ideas proposed by youth	58

List of Figures

Figure 3.1 Map of Mexico and location of the two communities	7
Figure 4.1 Educational status of youth across the two study communities	28
Figure 4.2. Youth-held study aspirations (across the two communities)	29
Figure 4.3. Current jobs held by youth interviewed in Analco	31
Figure 4.4. Current jobs held by youth interviewed in Jalapa del Valle	31
Figure 4.5 Likelihood of youth moving away from their community	38
Figure 4.6. Number of youth who held a <i>cargo</i> at the time of their interview	38
Figure 4.7. Degree of exposure to community assemblies among participating youth	40
Figure 4.8: Sense of representation in community assemblies	41
Figure 4.9 Perceptions of youth representation in community assemblies by age group	44
Figure 4.10 The activities that youth associated with forest management	51
Figure 5.1 Youth interest in forest-related work	55
Figure 5.2 Youth participation in community “tequios”	63
Figure 5.3 Youth participation in tequios by gender in both communities	63

List of Plates

All pictures were taken by Sylvia Constanza Mora Sánchez

Plates 4.1-4.6.	Youth from Analco and Jalapa del Valle, Oaxaca.	27
Plate 4.7.	Community member from the community of Analco.	35
Plate 4.8.	Sign at the entrance of Jalapa del Valle: <i>Welcome to Jalapa del Valle, land of usos y construmbres.</i>	37
Plate 4.9.	Female youth in Analco.	43
Plate 4.10.	Youth under the “cargo” of Education Counsellor, Analco.	46
Plate 4.11.	Male youth taking part in a ‘forest’ <i>tequio</i> in Jalapa del Valle.	49
Plates 5.1-5.6	Youth from the two communities participating in forest-based activities.	54
Plate 5.7.	Two middle school students during the Analco’s Workshop in August 2019.	60
Plate 5.8.	Message on wall that reads <i>Tequio: collective work for the community’</i>	63
Plate 5.9.	Youth during a workshop of Directional Felling in Analco.	66
Plate 5.10.	Youth during the exchange in Teococuilco de Marcos Pérez, Oaxaca.	67
Plate 5.11	Youth visiting the Forest during the Analco’s Workshop on August, 2019.	68
Plate 5.12	One of the charcoal ovens in San Juan Evangelista Analco	70

CHAPTER ONE

Introduction

Forests provide essential environmental services such as carbon storage, air and water purification, soil conservation, and habitat for plants and wildlife (Panayotou, 1990; Landsberg & Waring, 2014). Forests are also critical sources of sustenance and livelihood for local people; delivering food, building materials, and sources of income (Shackleton, Shackleton, & Shanley, 2011; Sunderlin et al., 2005). Where a strong dependency exists between people and forests, community-based forest management, or community forestry, can improve income streams while conserving natural forest ecosystems. This is accomplished through participation, cooperation, and collaborative decision-making (Bhattarai, 1985; FAO, 2016). While three quarters of the world's forests are held under public (state) ownership (FAO, 2015), an estimated 13% are currently under the control of local communities, with this figure rising to 30% in low- and middle-income countries (Hajjar & Oldekop, 2018). In some places, it is higher still. In Mexico, for example, rural communities have held legal rights over customary territories for over half a century (Merino, 2016), and as much as two-thirds of the country's forests are found on community-controlled lands (Bray, 2020). The remainder is under private ownership or administered and managed by federal and/or state government, typically within protected areas (White & Martin, 2002). As many as 1,621 communities in Mexico are known to be active in forest management (Bray, 2020).

Yet recent trends are suggestive of forest communities struggling to get the most from their forest commons (Hecht et al. 2015). In Mexico, national timber production has stagnated and overall declined over the past 10-15 years (CONAFOR, 2013; Hodgdon, Chapela, & Bray, 2013; Bray 2020). A mismatch between community capacities and the demands of federal government regulations is cited as one key barrier, affecting the competitiveness of forest enterprises and limiting needed investments in community forestry development (Hodgdon, Chapela, & Bray, 2013; Chapela personal communication). While external, market-related factors are also significant and well documented in community forestry circles (Klooster, Taravella, & Hodgdon, 2015), internal factors and challenges are less well understood. For example, as rural village populations shrink and age because of out-migration and low fertility rates, forest communities

can be left short of collective labour, energy, and ideas to invest in forestry activities (Aquino-Moreschi & Contreras-Pastrana, 2016; Robson, Klooster, & Hernández-Díaz, 2019). Such issues are a reminder that despite the increased prominence of community-based management regimes, their potential to simultaneously deliver forest conservation and rural development should not be taken for granted (Merino, 2016).

Shifts in village demographics shine a light on the possible need for greater inclusivity in community forestry structures; based on the idea that long-term success requires broad community memberships invested and involved in associated governance and work (Robson & Klooster, 2018). Current structures in Mexican community forestry are dominated by older, male community members, leaving several sub-groups underrepresented, including women, non-rights holders, and youth. The alienation and loss (out-migration) of youth is a particular concern, given the role that they will necessarily play in shaping forest and community futures (Robson, Klooster, & Hernández-Díaz, 2019). Recent work in Latin America is showing how local community leaderships are becoming aware of the need for young people to be a part of forest-related work and cultures (Zetina, Balas McNab, & Castillo, 2019; Robson, Sosa Pérez & Sánchez Luja, 2019). Yet published research in the areas of community forestry, and common property more broadly, have had little to say about the nature of youth-forest connections, and whether youth see community forestry as a viable and meaningful option for meeting work and life aspirations. It was the aim of my research to explore these and related questions.

1.1 Research Purpose and Objectives

The research was guided by the question, *How can Mexican forest communities engage and involve their youth to strengthen forest use and management?*, and three objectives:

1. Explore the perspectives (and values) of youth in relation to community, community institutions, and forest resources;
2. Document and explore the current and potential roles of youth in forest work and associated governance; and,
3. Identify practical strategies to integrate youth into forest use and management structures.

1.2 Study Region and Communities

The research focused on youth-community-forest connections among forest communities in Oaxaca, southern Mexico. Home to 16 distinct ethnic groups – many of which maintain their own language, cultural heritage, and deep connections to local environments (Lorence & García-Mendoza, 1989; Toledo, 1988; Salas et al., 1996) – 87.5% of titled lands in Oaxaca are under community control (Hernández-Díaz & Robson, 2019). These lands are heavily forested. Latest figures estimate there to be 6.2 million hectares of forest (GCF Knowledge Database, 2019), ranging from large extensions of pine, oak, and mixed pine-oak forests, to dry tropical forest, cloud forest, lowland tropical rainforest, and matorral (González, 1994). Oaxaca is the fourth most important state in Mexico in terms of timber production, with an average annual production of 500,000 m³. Forestry generates as much as \$50 million dollars in annual revenue, and 60,000 jobs across the state (GCF Knowledge Database, 2019).

The research focused on the experiences of two communities; the Indigenous Zapotec community of San Juan Evangelista Analco, and the (mixed heritage) ejido of Jalapa del Valle. The former constitutes my main community case study, where most of the fieldwork took place. It is located in the northern highlands, two hours drive from the state capital of Oaxaca City. The other community, Jalapa del Valle, is located much closer to Oaxaca City, is starting to embark with formal forest management, and promised to offer useful points of comparison and contrast to enhance data analysis and discussion. Communal authorities in both places had stated their desire to involve young people in community-level projects and activities (see Robson, Sosa Pérez & Sánchez Luja, 2019) and through early planning meetings had confirmed their interest in participating in the study.

1.3 Research Significance

The research presented in this thesis is significant in two main ways. First, it contributes to our understanding of adaptive commons governance, and specifically the role of youth. Second, the research was designed to provide information to help participating communities explore ways to democratize and strengthen their community forestry structures, and to create space for youth to have their views heard, and hopefully empowered to take a more active role in local community-making processes.

CHAPTER TWO

Literature Review

2.1 Introduction

In this literature review, I introduce and critique several areas of scholarship that set the context for the research, discuss concepts and ideas around which my research objectives are framed, and identify particular knowledge gaps that the research addresses. I begin by introducing the concept of environmental governance (EG). I provide a working definition, explain some of its different forms, actors, and modes, describe the features that scholars argue underpin good EG practice, and introduce community-based natural resources management (CBNRM) as a particular mode of EG. In the second section, I introduce the commons as a theoretical framework that describes and explains how communities of users manage and govern shared natural/environmental resources. I ground these discussions in the context of the place (Oaxaca) where I will be working. In the final section, I look at the role of youth in environmental governance, including commons management. I use lessons from environmental education and community development literatures to highlight the value of engaging youth in community-making and territorial processes. I end with a summary of lessons learned.

2.2 Environmental Governance

2.2.1 Definition and modes of environmental governance (EG)

Different conceptualizations of ‘environmental governance’ (EG) are found in the literature. For Jeffrey (2005), environmental governance is goal oriented; to achieve conservation and sustainable development through making and implementing effective decisions, strategies and initiatives. For de Loë, Armitage, Plummer, Davidson, & Moraru (2009), EG is explicitly about the processes and institutions through which societies make those decisions. This resonates with the framing of Lemos & Agrawal (2006), who describe EG as the interventions that create environment-related incentives, knowledge, institutions, decision-making, and behaviours, and necessarily include the regulatory processes, mechanisms and organizations through which actors influence environmental actions and outcomes.

What these interpretations have in common is they all view governance as “not the same as government” (Lemos & Agrawal, 2006). While government is described as a group of organizations that govern, governance is focused on the actions, processes, and functions of the actors (who can be situated inside or outside of formal government) that frame and shape environmental use and management (Robinson, Bennett, King, & Murray, 2012; Young, 1996). This broad perspective offered several avenues to explore as part of my research, including the institutional changes that may be needed for greater youth involvement in forest work structures. Environmental governance encapsulates different sets or constellations of governance actors or protagonists, which de Loë et al. (2009) classify into five main models (Table 1).

Table 2.1: Generic Models of Governance in Environmental Policy

Model	Key Characteristics
Regulatory	Governments are the regulators. Change occurs through the alteration of rules and policies Starting model for environmental policy.
Market Regulation	Price mechanisms provide control and are facilitated by governments. Change occurs by re-configuring price mechanisms.
Civil Society	Engaged citizens play a dynamic role in civil society. Change occurs through dialogue and debate.
Co-operative management	An array of actors (e.g., government, non-governmental organizations, private) interact in a collaborative manner. Communication and dialogue are the basis for voluntary agreements. Focus is on organized interests, rather than on individual citizen participation
Contextual control and self-regulation (Communities)	Sub-systems or actor networks form and address environmental issues. Network formation is an outcome of self-reflection regarding appropriate actions for the social context and the environmental challenges. Governments intervene to provide corrective measures when necessary.

Lemos & Agrawal (2006) referred to additional, “hybridized” forms that combine aspects of two or more of these models, namely: community-driven, co-management, public-private partnerships, and private-social partnerships. Across these different models and hybrid strategies, EG often involves the integration of and communication between multiple actors and agreements: communities, policy makers, economic policies, institutions, international accords, national policies, local policies, local (community) decisions, transnational institutions and NGOs. It is the scope and nature of these interactions that structure EG identities, activities, and consequences (Lemos & Agrawal, 2006).

2.2.2 What constitutes good EG?

While scholars talk about what EG is, and what forms EG can take, it is also important to understand what constitutes good practice in EG. With regards to governance in broad terms, Crabbé & LeRoy (2008) saw accountability, transparency, responsiveness, equity and inclusion, effectiveness and efficiency, participation, and consensus-oriented decision-making as among the most important things to consider and promote. Many of these same principles are reflected in EG good practice, as laid out by Armitage, de Loë, & Plummer (2012, p. 248):

1) Recognition of the importance of fit and scale. This referred to the idea that resource governance institutions should match local environmental or ecological systems and realities, as well as the social and cultural realities of the population(s) of resource users (Epstein et al., 2015).

2) Fostering adaptiveness, flexibility, and learning. Because uncertainty is inherent in social-ecological systems, EG needs to be flexible and adaptive, and a continual opportunity for institutional learning, evolution and change.

3) Co-producing knowledge from diverse sources. The idea that knowledge from multiple actors is essential to inform and evaluate governance processes and outcomes, and to benefit from actor feedback.

4) Understanding the emergence of new actors and their roles in governance. This spoke to the importance of institutional and organizational renewal in governance, whereby new perspectives bring new ideas and experiences, and enhance the knowledge that feeds good governance.

5) Changing expectations about accountability and legitimacy. The sense that accountability and legitimacy is undermined when power is unequal among diverse actors, such that equitable power, voice, and representation should be considered from the beginning of EG processes.

All five aspects of good practice in EG are arguably relevant to the question of youth engagement in forest governance. Armitage, de Loë, & Plummer (2012) noted that the best results tend to emerge where there is collaborative development and a sharing of knowledge by multiple actors, which can require new actors to be incorporated, along with assigning them specific roles and responsibilities (Ludwig, 2001). My thesis sought to explore with young

people their current level of participation in community forest governance and consider opportunities for them to take on more substantive or active roles. Finding roles for young people in forest practice and associated decision-making might point to a governance system that is sufficiently adaptive to benefit from new sources of knowledge, better fit social and cultural realities, and bring more voice and representation (i.e. legitimacy) across broad community memberships.

2.2.3 Community-based environmental governance

In a not too distant past, Indigenous and local communities were often not included or considered in natural resource management and planning projects; indeed, they were often seen as a barrier rather than a solution to environmental issues and crises (Gruber, 2008). However, in recent decades, community-based approaches to environmental management have become more prevalent, more extensive, and have established themselves as a legitimate form of environmental use, management, and protection (Marshall, 2007). Community-based natural resource management (CBNRM) has been presented as an effective method of natural resource management, especially when it coincides with statutory recognition of local rights to customary lands and territories (Little, 1996; Klooster & Masera, 2000).

Based on an analysis of community-based approaches to environmental management, Gruber (2008, pp. 56-57) identified 12 organizational principles to increase the probability of a successful CBNRM initiative:

- 1) public participation and mobilization;
- 2) social capital and collaborative partnerships;
- 3) resources and equity;
- 4) communication and information dissemination;
- 5) research and information development;
- 6) devolution and empowerment;
- 7) public trust and legitimacy;
- 8) monitoring, feedback, and accountability;
- 9) adaptive leadership and co-management;
- 10) participatory decision making;
- 11) enabling environment: optimal preconditions or early conditions; and,

12) conflict resolution and cooperation.

In addition to the need for community involvement, scholars have stressed the importance of recognizing the presence of multiple actors within communities, and how they have the power to make decisions, influence internal and external institutions (and the impact these have on one another), and shape local development processes (Agrawal & Gibson, 1999). Because CBNRM initiatives are based around the active participation of a broad community membership, collectives need to act collectively, and ensure that all members feel invested in processes, actions, and initiatives (Gruber, 2008). This means finding a role for any sub-groups, which may include youth, that are underrepresented in such processes.

Successful CBNRM may also require effective links and networks to be forged between community and outside regulators and interests. This is captured in the idea of nested, multilevel governance – where functions such as environmental monitoring and the enforcement of resource use may not be possible only at the community level but requires organization into multiple, reinforcing, layers of governance (Ostrom, 1990). This holds true for forest use and management in Mexico. Multi-level arrangements can provide important support to community-based organizations and institutions, including state policies and programs that are oriented towards meeting local needs and realities (Swallow, Garrity, & Van Noordwijk, 2002; Young, 2002). However, as more actors become involved in governance, the chance of conflict between participants may increase (Sattler et al., 2016), while communities themselves need to build their internal capacities and capitals to interact effectively with external governance actors. Younger community members may play an important role in building those capacities, especially because of greater access to formal education and training.

2.3 Commons and Commons Theory

Much of the literature on CBNRM is underpinned by theoretical insights from work on the commons, which can be understood as spaces of shared resources, shared wealth, and the collective action needed to determine how such resources can be accessed, used, and managed in sustainable and just ways (Bollier, 2014). While it has been applied to non-environmental resources – such as knowledge (artificial/constructed, immaterial), information (digital and technological), and genetics (see Basu, Jongerden, & Ruivenkamp, 2017) – most scholarship on the commons has been associated with describing, understanding, and explaining natural and

environmental resources as shared governance regimes. In my research, forests are the focus commons; understood as the timber and non-timber forest resources that groups of people share access to and manage for individual and collective benefits. In this section, I describe theoretical work on the commons, from Garrett Hardin to Elinor Ostrom and colleagues. I then apply my understanding of the commons to community forests in Mexico, detailing how these regimes function and some of the contemporary challenges they face.

2.3.1 Constructing an alternative to Hardin's tragedy argument

Environmental commons are a challenge to manage and govern sustainably. Ostrom (1990) referred to the biophysical resources of environmental commons as “common pool resources” (CPR) – a type of good or resource system (forests, irrigation system, fishery) whose size or physical characteristics make it costly, but not impossible, to exclude potential beneficiaries from obtaining benefits from their use. Unlike most public goods (air, sunlight), CPRs can be easily overused because they are subtractable; when a unit of the resource is harvested or consumed, that means one less unit available to other users. The combination of high rivalry (difficult to exclude users) and high subtractability make CPRs, such as forests, prone to depletion and degradation.

The depletable nature of many shared natural resources, combined with ideas about user behaviour, underpinned Garrett Hardin's (1968) seminal work, the “Tragedy of the commons”. Arguably the first time that the commons had been conceptualized for a broad academic audience (Berge & Van Laerhoven, 2011; Berkes, 2009), Hardin stated that when a resource is held “in common”, users will act as self-interested, economic actors to exploit the resource to their full benefit over the short term; leading to the so-called “tragedy”. Yet subsequent work has challenged Hardin's theory, showing that he failed to make a conceptual distinction between the characteristics of CPRs and the property rights that govern their use. Hardin equated the commons with an ‘open access’ regime, where resources are owned by no one (an absence of property rights), making them more prone to depletion through overuse (Ciriacy-Wantrup & Bishop, 1975). As the work of Ostrom (1990) and others has shown, not all commons are in an open access situation. Rather, there are many examples of commons managed jointly by local users, who self-organize to govern how shared resources are accessed, used, and managed (Husain & Bhattacharya, 2004).

In other words, empirical work has shown how commons can be managed sustainably when underpinned by community-derived norms, rules, and values (social practice), which inform how such resources are perceived, accessed, and used (Ostrom, 1990; Ostrom et al., 1999; Berge & Van Laerhoven, 2011; Basu, Jongerden & Ruivenkamp, 2017). In this way, ‘commons’ are as much socially constructed as they are sets of biophysical resources. And, over time, the practices and institutions of the commons can become bound up in the language, knowledge, and custom of the collectives who depend upon and manage them (Basu, Jongerden, & Ruivenkamp, 2017). These different conceptualisations of the commons have had an important influence on environmental policy-making. Hardin’s ‘Tragedy of the Commons’ argument supported policies to privatize or nationalize common-pool resources such as forests and rangelands. In contrast, the work of Ostrom and others called for programs that devolved tenure rights to local and Indigenous communities, encouraged land and resource co-management arrangements between communities and the state, and established or strengthened community-based resource use and management strategies (Agrawal, 2002). Such approaches were based on the rationale that when local users have greater control (rights) over common-pool resources, they are more incentivized to manage them sustainability (White & Martin, 2002; Molnar, Scherr, & Khare, 2004; Ribot, Agrawal, & Larsson, 2006; Chhatre & Agrawal, 2009).

2.3.2 Commons institutions

Ostrom’s theoretical and empirical work showed that communities of resource users can and do self-organize to craft institutions to govern local commons. Such institutions are often understood as the rules-in-use that shape and regulate interactions between user and resource (Agrawal, 2002; McCay, 2002). They may be crafted for multiple reasons; as a response to the scarcity of valued resources, to stake claims over resources or protect them from outsiders, as a way to promote cultural identity and political power, or to manage conflict (McCay, 2002). However, commons institutions also encapsulate the unwritten norms and cultural mores that underpin the social fabric of commons collectives. And like formal rules, such institutions are not static but rather evolve or lose relevance in response to changing conditions (Oakerson, 1992). Institutions thus provide an important lens by which to examine the robustness of local commons regimes. In my study, the institutional arrangements of forest commons in Oaxaca, Mexico were considered when analyzing the current role that youth play in these regimes, and how associated governance structures could be made more inclusive and viable over the long-

term. This is based on the premise that common institutions function best if and when a broad swath of community members feel invested in associated processes and outcomes. Several things can incentivize local people to invest in crafting and maintaining commons institutions: from holding rights to resources (Berkes, Feeny, McCay, & Acheson, 1989); to deriving individual and collective benefits from the commons (Berkes et. al., 1989; Feeny et. al., 1990) and having the social capital to work together to debate and enact institutional change (Brondizio, Ostrom, & Young, 2009).

Little has been written about generational differences in how commoners perceive of and take part in such arrangements and structures. This was relevant for my research, which considered how young people in the study sites perceive their local commons, and explored youth-held ideas for strengthening participation and involvement in commons management. I sought to ask youth if they feel a part of these collectives, and hoped to identify factors and possible barriers that are affecting their continued or future investment in these regimes.

2.4 Community Forestry in Mexico

Mexico is home to approximately 66 million hectares of forest, or over one third (34%) of the country's terrestrial territory. These forests are home to high species diversity, high genetic diversity and very high endemism for certain taxonomic groups (Ceballos et al., 2002; Mittermeier et al., 2005). This forest coverage is uneven across states, with most forest found in the states of Chihuahua, Oaxaca, Durango, Guerrero, Jalisco, Campeche, Sonora, and Chiapas (Madrid, et al., 2009). Oaxaca is the state with the third largest forested area, with 6.2 million hectares (GCF Knowledge Database, 2019). Oaxaca's forests are highly diverse, and include all the major forest types found in Mexico (Robson, 2007; INEGI, 2019).

Most of Mexico's forests – close to two-thirds – are community owned and managed, falling under one of two 'social property' land tenure systems: *comunidades agrarias* (agrarian communities) or *ejidos*¹, both constituted under Article 27 of the Mexican Constitution² (Carrasco & Barkin, 2014). These systems are the product of the Mexican Revolution (1910-

¹ “*Ejidos* were created when the government granted land to groups who demanded it, including former hacienda workers. *Comunidades agrarias* resulted from the official recognition of the historical rights of Indigenous communities” (Merino, 2016, p. 237).

² Which limits the intrusion of private interests into the appropriation of natural resources.

1927) and the agrarian reform process that followed³. As these reforms were instituted, local forests were considered of limited value by the state and titled under common property (Bray et al., 2003). This has remained the case since the early to mid-twentieth century, notwithstanding a 25-year period (1950s-1980s) when the federal government took back control of large areas of forest in Mexico to lease to private logging interests. When this concession period ended, increasing numbers of forest communities began to manage their common-property forests for commercial ends. Some even became vertically integrated in timber commodity chains, through industrial processes long thought to be beyond the reach or capacity of such marginalised areas (Bray et al., 2003). By the 1990s, few other countries in the world approached the number of community forest enterprises (CFEs) found in Mexico (Bray & Irvine 1993; Arnold 1998). Similarly, no other country approached the number of FSC-certified community forests (FSC, 2002), with the Mexican experience considered something of a precursor to the emergence of community forestry in other parts of Latin America, notably Guatemala, Peru, Brazil, and Bolivia (Gretzinger, 1998; Loayza-Villegas & Chota-Valera, 1996; d'Oliveira et al., 1998).

In Mexico, forest communities have been categorized into five main types, according to their level of forestry development and integration (Hodgdon, Chapela, & Bray, 2013). Type I are considered potential producers that have not yet obtained logging permits. The number of Type I communities in Mexico is not clear. In terms of Types II-IV, as of 2013, 699 (43%) were Type II communities (who sell timber on the stump), 738 (46%) were Type III communities (selling timber as roundwood), and 184 (11%) were Type IV communities (with their own sawmills). There is then a smaller but undefined number of Type V communities, which have invested in added-value finished product processing. They can sometimes employ hundreds of workers from the community and surrounding areas. In recent work, Bray (2020) proposed an additional category, Type VI, to cover the increasing number of communities who manage their forest exclusively for non-timber forest products, such as ecotourism, conservation, and ecosystem services. It has been reported that such a portfolio of forest-based activities can help communities to increase their income streams (Cubbage et al., 2015) and enhance community resilience (Berkes & Ross, 2013).

³ “Legally, *comunidades agrarias* are able to incorporate young members at their will, while *ejido* members can only pass on their rights to a single successor. Community forests have to be commonly managed, and their division or sale is legally prohibited” (Merino, 2016, p. 237).

2.4.1 Mexican community forestry in the context of rural change

These CFEs operate within the context of transformative change impacting rural regions.

Robson, Klooster, and Hernández-Díaz (2019) talk about a “rural transformation” taking place in Mexico, driven by declines in traditional agriculture, demographic changes (as a result of smaller families, better educational opportunities, etc.), greater rural-urban connectivity, and an increased emphasis on non-extractive land practices such as formal conservation. These are changes with implications for the continuance of long-standing land-based practices and associated governance.

Rural out-migration is one driver of change contributing to this ‘new rurality’ evident in Mexico (Burkham, 2012), Latin America (Kay, 2008), and other global regions (Berkes, 2009). As people move away from rural areas, associated demographic and cultural change will affect forms of management dependent on collective labour and investments (Klooster, 2013; Robson et al., 2018). On the one hand, lower resident populations can free up territorial and public resources for those who remain. On the other hand, population loss reduces the number of people who can invest, physically and mentally, in the work of the commons; to maintain the institutions and organizational structures that underpin these regimes. The temporary, circular, or permanent movement of people away from home communities can present a dilemma for how commons, including forest commons, are viewed and administered (Klooster, 2013).

The implications of such change extend to the youth who live in, choose to leave, or return to these places (Robson, Klooster, & Hernández-Díaz, 2019). Youth growing up in forest communities in rural Oaxaca are all potential migrants. Recent work by Robson, Sosa Pérez & Sánchez Luja(2019) points to the large numbers who plan to leave (at least for a time), whether in search of wage labour or to further their studies. But youth are also among the stay-behinds, and may be asked (especially in those villages with small populations) to contribute to the work of managing forest commons at an earlier age than has been the norm. Work by the ‘Future of Forest Work and Communities’ project (see Robson et al. 2019) has shown how community leaderships, not only in Oaxaca but in other parts of Latin America, want to see their youth more involved, and view forest work as something that may attract youth to stay in (or return to) their home village (Robson, Sosa Pérez, & Sánchez Luja, 2019; Zetina, Balas McNab, & Castillo, 2019; Quadvlieg et al., 2019).

2.5 Youth, Commons, and Community Development

2.5.1 Role of youth in environmental governance and stewardship

The role of youth in environmental stewardship and governance has received increased attention in recent years (Noor & Fatima, 2012), as associated policies and programs call for greater civic participation and responsibility (Lane, Lucas, Vanclay, Henry, & Coates, 2005). In Pakistan, for example, a national-level strategy, the Youth Engagement Service (YES), was established to find solutions to waste management, water pollution and soil erosion problems, and identified youth engagement and participation as vital for nation building and improvement. It looked to achieve this through a five-step process: inform, consult, involve, collaborate, and empower (Noor & Fatima, 2012). In Rwanda, the Global Green Growth Institute (GGGI) targeted youth involvement to help meet the challenges of climate change, food security, water scarcity, natural disasters, and infectious diseases, among others. The GGGI (2018) views “youth participation [as essential] in reorienting development pathways toward sustainability”. Leading international organizations, such as the United Nations Environment Program (UNEP) and UNESCO, are pushing for youth participation in decision-making and programming for sustainable development (Noor & Fatima, 2012; <http://www.unesco.org/new/en/social-and-human-sciences/themes/youth/>)

Despite these emergent trends, scholarly work on the role of youth is limited, especially within community-based settings and contexts. Some have highlighted education as a key way to reach youth and promote their participation in natural resource management (Lane et. al., 2005). Zurba and Trimble (2014) used real world experiences from fisheries and forest management to demonstrate how natural resource crises, be they social-ecological or socio-economic, can have profound effects on youth, frame how youth could participate differently, and ultimately shape how they take part in future resource practices and management systems. Yet when it comes to using and managing or co-managing natural resources, and making decisions and crafting rules to guide work on the land, youth are largely absent from a published literature that considers older adults to be the key protagonists. Menegat (2002) is one of the few scholars to have written about possible ways to integrate youth as resource actors within their communities and constituencies, focusing on the areas of citizen participation, public environmental management programs, comprehensive knowledge of local environment, and environmental education.

It is an area of scholarship that needs building upon. In particular, the question of what motivates communities – their leaderships and organizations – to involve youth in environmental stewardship and governance practices, structures and initiatives, and what motivates youth themselves to get involved and how they might affect change through their actions (Schusler et al., 2009) are important lines of inquiry.

2.5.2 Youth and rural commons in Mexico

In most scholarly work on the commons, community leaderships and heads of household are the key “local” actors. These are the individuals and groups that researchers most often talk to when conducting fieldwork, and subsequently write about. A scan of the Digital Library of the Commons (<https://dlc.dlib.indiana.edu/dlc/>) found that the keywords “youth” or “young people” appeared in just 6 of the 10,344 titles housed⁴. Demographic realities in places where rural commons exist warrant a much greater focus. Around 20% of Latin America’s youth (those aged between 15 and 29 years of age) live in rural areas (Espejo, 2017). In Mexico alone, rural youth (between 12 and 29 years of age) number nearly 8 million (Soloaga, 2018). Given demographic transitions (reducing and aging rural populations, smaller family size) and cultural and economic change underway in rural areas, the question of where youth fit within contemporary commons regimes remains underexplored.

In Oaxaca, youth are under-represented in territorial governance structures (Aquino-Moreschi & Contreras-Pastrana, 2016; Robson, Sosa Pérez & Sánchez Luja, 2019), with little known about their views and perspectives, or level of interest in participating in a culture of land-based work. We know that their aspirations can take young people away from their communities of origin (Robson & Klooster, 2018), but recent research also suggests that youth remain strongly connected to community, territory, and local forests, as places where their culture and identity is rooted (Robson et al., 2019; Robson, Sosa-Pérez, & Sánchez-Luja, 2019). This suggests that it would be quite wrong to assume that youth hold limited interest in the commons and the livelihoods they afford. In addition, exploratory work with youth living in forest communities in Africa, Asia, and the Americas (Robson et al., 2020) point to local youth wanting to get more involved in community-making projects and processes.

⁴ Of these 10,344 titles, 113 are books, 108 are book chapters, 3755 are conference papers, 3992 are journal articles, 167 are theses or dissertations, and 2202 are working papers.

2.5.3 Youth as agents of change in community development

Among the most ratified international treaties in history, the United Nations Convention on the Rights of the Child (OHCHR) makes participation in society a fundamental right of all young people⁵ (OHCHR, 1989). During youth-hood in particular, individuals reach an age when they are preparing themselves to be active and fully responsible members of the society or societies that they are a part of (Noor & Fatima, 2012).

According to Checkoway (1998), youth participation can be defined as their involvement in different activities and real influences in the decisions that affect their lives. O'Donoghue, Kirshner, & McLaughlin (2002, p. 16) add the importance of empowerment, such that adolescents “*take part in and influence decision making that affects their lives and to take actions on issues they care about*”. This second definition in particular resonated with the goals of my planned research. It is believed that youth participation can contribute to organizational sustainability and effectiveness, as well as democratic, social, and economic development (Zeldin et. al., 2000; Rajani, 2001), and a fundamental component of change movements (Espinosa & Schwab, 1997; Brandão, 1998). Youth participation is also seen as important for challenging problems of social exclusion within collectives, to redistribute power within such spheres, and help to create the conditions that better meet a diversity of personal, professional, and shared aspirations (O'Donoghue, Kirshner, & McLaughlin, 2002; Cahill, 2007). Such approaches view young people as “agents of change” in development processes (Ginwright & James, 2002; Checkoway, 2012), with the promise of beneficial outcomes informing the establishment of youth organizations and strategies to incorporate youth voice into organizational decision-making. It is also argued that community and youth development are (or should be seen as being) interdependent, with one directly shaping the other (Barnett & Brennan, 2006). When communities properly engage their young people, youth can feel empowered to invest their time, energy, and ideas into solving pressing problems, to make decisions, and become the future leaders and knowledge-holders of their communities (Barnett & Brennan, 2006).

⁵ **Article 15** Parties recognize the rights of the child to freedom of association and to freedom of peaceful assembly. **Article 31** Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.

Yet, while it can be important for young people to participate in the development of their communities (Huber, Frommeyer, Weisenbach, & Sazama, 2003), their roles and responsibilities within community settings are not well defined (Brennan & Barnett, 2009). Numerous researchers emphasize the benefits of youth involvement in decision making and public engagement (O'Donoghue, Kirshner, & McLaughlin, 2002), but don't explain how that process can or should be structured (O'Donoghue, Kirshner, & McLaughlin, 2002). As such, endeavours to engage and mobilize youth raise several important questions to consider, including the principles by which youth civic engagement should be pursued, and the particular strategies, structures, and skills that may be critical to their success (Campbell & Erbstein, 2012). Involving youth in community development could include the development of (adult to youth) mentoring programs, providing space for youth to work on their own project ideas (with or without adult assistance), and efforts by youth and adults to work together in intergenerational partnerships (Checkoway, 1998).

Of course, youth involvement in community processes and structures is tied inextricably to existing cultural, political, social, and economic realities within that place and collective, which will influence the role that youth could or should play. This was the case for my research in rural Oaxaca, where I looked to explore the perspectives of not only youth but also older, adult community members, both male and female, who hold power within the community sphere. An important part of the work is to determine if and how youth voices are or will be listened to, and whether youth can be considered potential "agents of change" by other community members. Communities in the region understand that youth participation (or non-participation) could have an important impact on framing community and forest futures (Robson, Sosa Pérez, & Sánchez Luja, 2019), but may not be able or willing to adapt long-standing structures or instill flexibility within (often) entrenched memberships in ways that enable youth to be more actively and meaningfully involved. In other words, context matters and needs to be understood since it goes such a long way to defining and determining what local efforts in youth engagement can look like (O'Donoghue, Kirshner, & McLaughlin, 2002).

CHAPTER THREE

Methodology

3.1 Researcher Background

I am originally from Mexico City. I hold a degree in Biology and a second degree in Economics, and have worked in recent years in Latin America and United States with environmental non-profits. Most of that work has been related to local and community conservation projects.

Through that work, I realized the key role that people play in effective conservation and resource management. Since my background is not in the social sciences, I was keen to develop my research skills through an interdisciplinary Master's program and a project that was people-centred. The opportunity to work with youth was of particular interest. I had worked with youth during 6 years with Ecology Project International, a non-profit that links science and young people together, through camps, workshops and programs. I could see first-hand the importance and impact of partnering local young people with university staff to form collaborative fieldwork teams. The research in Oaxaca offered the chance to build on previous work experience, develop new skills to enhance my personal and professional development, and help me better understand the realities affecting rural, Indigenous communities in my own country.

3.2 Methodological Approach

The research I present in this dissertation was qualitative in its approach, follows a case study strategy of inquiry, and is influenced by many of the principles of community-engaged research. In this section, I explain why a case study strategy was chosen. I then describe the two forest communities in Oaxaca that I selected as case studies, the rationale for their selection, and how these communities were engaged to participate in the study.

3.2.1 Case study strategy of inquiry

A case study is a design or strategy of inquiry in which the researcher develops an in-depth analysis of a case, often a program, event, activity process, or an individual or group (or community) of individuals. Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures (Stake, 1995; Yin, 2018). It can be difficult to separate out the issue(s) under investigation from the context (people and place) within which the study is situated – such that the boundaries between phenomenon and

background may not be clearly evident (Yin, 2018). A case study can help researchers better understand real world issues, while demanding an appreciation of the contextual conditions of the case in question (Yin & Davis, 2007). According to Yin (2018, p. 15), case studies enable the researcher to: benefit from the prior development of theoretical propositions to guide design, data collection, and analysis; and, rely on multiple sources of evidence, with data needing to converge in a triangulating fashion.

For my research, *this strategy of inquiry* offered methodological flexibility to help understand adaptive change in a specific social-ecological system (forest commons), and to tease out the contextual conditions that frame how such change may unfold among a particular community of people.

3.2.2 Study region and communities

The research was conducted in the State of Oaxaca, in Southern Mexico (Fig.1). I worked in two communities. Their respective locations are shown in Figure 1.

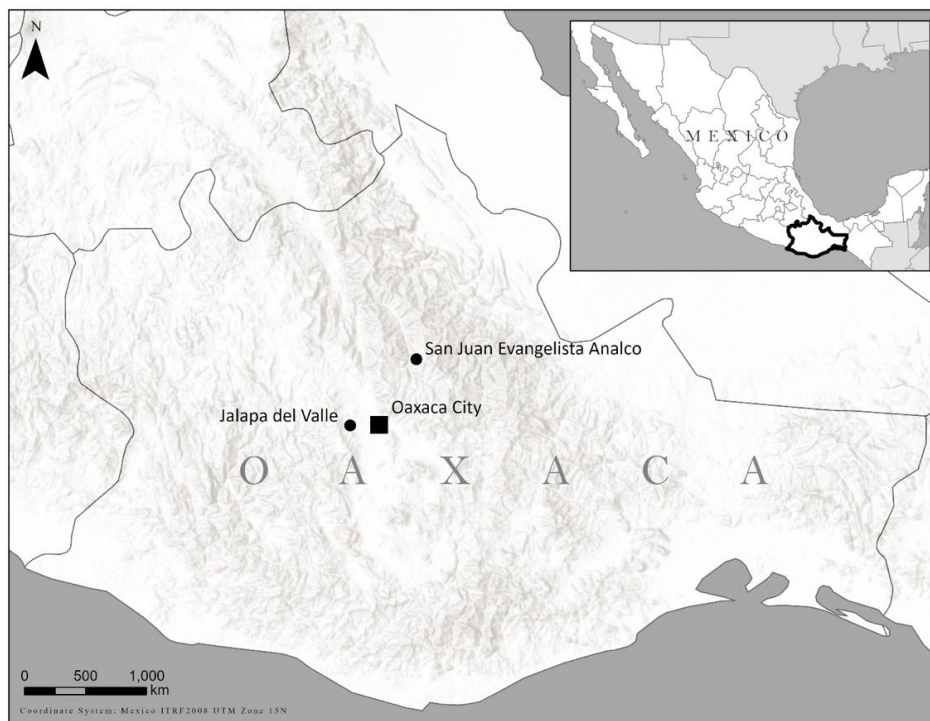


Figure 3.1. Map of Mexico and location of the State of Oaxaca and the location of San Juan Evangelista Analco and Jalapa del Valle, Oaxaca.

The main community case study was San Juan Evangelista Analco, located in the Sierra Norte (northern highlands) region of Oaxaca. Two-thirds of my fieldwork time was spent in this community, collecting data for all three research objectives. Findings from Analco were then supplemented by work conducted in a second community, Jalapa del Valle, located in the Valles Centrales (Central Valleys) region of Oaxaca and close to a major urban centre (Oaxaca City).

3.2.3 Selection criteria

San Juan Evangelista Analco and Jalapa del Valle were selected for several reasons. Exploratory research in 2017 (reported in Robson, Sosa Pérez and Sánchez Luja, 2019) suggested important youth-community-forest connections in both places, and a stated interest among communal authorities to involve young people in forest-specific projects and activities. I approached the two communities in February 2019 to discuss the proposed project, and both responded positively.

The two communities had enough similarities and differences to offer potential points of contrast and comparison. Both have similar sized territories and forest areas (in a regional context), but marked differences in terms of history of settlement, the nature of rural-urban linkages, forest type and diversity, and (histories of) forest use. Analco is located in the sparsely populated northern highlands, a two-hour drive from Oaxaca City. Jalapa lies just outside Oaxaca City, a growing urban centre of some 300,000 people. The community of Analco reported 460 residents in 2018, with 31.5% (145) between 10 and 29 years of age. Jalapa del Valle reported a total population of 1543 inhabitants (in 2015), with 36.5% (563) aged between 10 and 29 years of age (Local Health Center Census, 2018).

Analco is home to an ecologically diverse forest landscape, and more livelihood dependence on forest resources than Jalapa del Valle (Robson et al. 2019). It began commercial forestry operations in 2013. Jalapa is less diverse in forest type and practised a no-touch forest policy from the mid-1970s until 2017, when it voted to eschew strict protection in favour of formal forest management. In late 2018, its first management plan was put into action. Out-migration has been an important phenomenon in both places in recent decades (Robson, personal communication).

3.2.4 Community engagement

Community engagement can be defined as “the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people” (CDC, 1997). Research has shown that adopting such a process when working with Indigenous or other local communities can produce more positive results (Legat, 1994; Masazumi & Quirk, 1993). A community-engaged approach provides an opportunity for the researcher and community members to create good working relationships, build trust, and strengthen researcher commitment to ensure that the research is conducted ethically and in ways that deliver lasting benefits to participants (Reed et al. 2020). Such an approach includes the involvement of study communities at an early stage in research planning and design. While I did not consider the research that I was doing community-engaged research per se, I tried to follow a number of these principles in guiding my research and fieldwork.

In mid-February (2019) I visited both communities, along with my supervisor and Yolanda Lara and Francisco Chapela, who are founding members of the project’s NGO partner, Estudios Rurales y Asesoría Campesina, A.C (ERA). The goal was to present the project idea to the communities’ respective communal authorities (*Comisariado de Bienes Comunales*, or Office of the Common Property Commissioner) and invite them to participate in the research. As well as verbally present the proposed research, a written statement of intent was left for their records (see Appendices 3 and 4). After an interesting and lengthy discussion (1-2 hours) about the proposed research, mutual benefits and expectations, and ideas regarding research design, the authorities in both communities passed a motion to participate. They confirmed the age ranges that they see as encapsulating ‘youth’ in the local context (14-29 years of age, with a core group that falls within the 16-25 age range), and identified some key local contacts for me to follow up with (school principals, foresters). They also talked through the appropriate protocols for getting informed consent from youth under the age of 18 (see consent section below for more details). There was an agreement that written or oral informed consent should be requested from all participants. It was agreed that no formal research agreement was needed; in part because my supervisor and ERA have long-standing working relationships with the two communities.

3.3. Data Collection Methods

The methods used to collect data for each of the three objectives are summarised in Table 3.1. It should be noted that while the full range of data collection methods were conducted in San Juan Evangelista Analco, data collection in Jalapa del Valle was limited to semi-structured interviews with youth, a focus group with youth, and a group interview with communal authorities.

Table 3.1. Summary of data collection methods by research objective

Objectives	Data Collection Methods
Explore the perspectives (and values) of youth in relation to community, community institutions, and forest resources	<ul style="list-style-type: none"> • Participant observation • Semi-structured interviews (with youth)
Document and explore the current and potential roles of youth in forest work and associated governance	<ul style="list-style-type: none"> • Participant observation • Semi-structured interviews (with youth) • Semi-structured interviews with other community members, NGO and government staff • Group interview with communal authorities • Focus groups (with youth) (in Jalapa) • Focus groups (adult women) (in Analco)
Identify practical strategies to integrate young people into forest use and management structures	<ul style="list-style-type: none"> • Community workshop in Analco (facilitated by ERA) • Semi-structured interviews (with youth) • Semi-structured interviews with other community members, NGO and government staff • Field Visit (Jalapa del Valle)

3.3.1 Interviews and interview participants

Sixty-three semi-structured (individual and group) interviews were conducted across the two communities, involving different categories of participant (Table 3.2). 34 (54%) of the participants were young people between 14 and 29 years of age; 19 from San Juan Evangelista Analco and 15 from Jalapa del Valle. Other community members interviewed for this research included 12 interviews with older adults (11 in Analco, 1 in Jalapa), and 6 interviews with communal authorities; 4 in Analco and 2 in Jalapa. 10 interviews were held with ‘experts’; members of the academy, government or non-governmental organizations that study or support the community forestry sector. Youth interviews followed a semi-structured script of 18 questions. All other individual interviews followed a semi-structured script of 10 questions.

Example interview scripts are provided in Appendix A. A sample consent form for individual interviews is provided in Appendix B.

Table 3.2. Numbers of interview and types of participant

Participants	Analco	Jalapa	Total
Youth, 14-16 yrs of age	5 interviews	4 interviews	9
Youth, 17-21 yrs of age	4 interviews	7 interviews	11
Youth, 22-25 yrs of age	3 interviews	2 interviews	5
Youth, 26-29 yrs of age	7 interviews	1 interviews	8
Forestry Technician	1 interview	1 interview	2
Older community members	10 ind. interviews, 1 focus group	1 interview	12
Village Authorities	2 ind. interviews, 2 grp. interview	1 ind. interview, 1 grp. interview	6
Experts (Academia, NGO, Government)	n/a	n/a	10 Interviews
Total	35	19	63

3.3.2 Methods for Objective 1

I spent four months living in Analco. Participant observation (PO) and engaging in what local people call “convivencia” (living and sharing with others) formed an essential part of my methodological toolkit. Participant observation is a method that allows a researcher to be involved with different activities over an extended period of time that can aid in understanding and observing the culture and cultural practices of the community where they are working. It helps the researcher better understand community members' behaviours and activities (Kawulich, 2005). This involved accompanying and assisting young and old community members in everyday tasks, participating in communal work in the forest, and attending community social events, communal duties and fiestas. Informal interviews took place as part of PO, with jot notes, field notes, and journaling used to capture and reflect upon PO experiences and insights. During my stay in Analco and in Jalapa, I took walks by myself or with my adopted family around the village, and I observed what is there and how youth are using specific spaces. These observations helped to generate ideas and insights to inform my interviews and focus groups.

I conducted 34 semi-structured interviews with youth (of different ages and genders) to better understand their views and perspectives about community, forests, and community forestry initiatives. Five major topics were covered: **Aspirations** (work, studies, family, future projects, the meaning of success), **Migration** (wishes and desires of migrating or staying, previous or current experiences outside the community), **Community life** (duties as future or current community members, assemblies, tequios/unpaid collective work, decision-makers and youth representation) **Forest** (collective forest management, the value and attachments with the forest and land, interest in forestry work), and the **Future** (of the community and its forest). The advantage of semi-structured interviews is that questions can be asked and ordered according to the flow of the conversation, providing important flexibility in how the interviewees articulate their responses (De Pedro-Ricoy, 2017).

3.3.3 Methods for Objective 2

Semi-structured interviews with youth included a number of relevant questions to document and explore their current and potential roles in territorial governance and collective projects. In addition, I spoke to parents in both communities (male and female), forest technicians, community leaders, and NGO and government staff working in the region in order to understand their perspectives about youth-community-forest connections and possibilities.

Four major topics were touched upon: community forestry in Mexico and Oaxaca; challenges facing community organization; perspectives on youth (commitment to and opportunities from the forest sector); and, community futures. This enabled me to better identify what constitutes current levels of youth engagement, some of the factors that enable or hinder engagement, and explore how youth might be involved in future forest work and associated governance arrangements. Insights from individual and group interviews were used to inform a focus group with the mothers of middle schoolers in Analco. Focus groups can help researchers explore particular perceptions, opinions, beliefs, and attitudes held by people but within an interactive group setting where participants discuss, deliberate, and bounce ideas off of one another (Berg, 2007). Guiding questions for this focus group are provided in Appendix A.

3.3.4 Methods for Objective 3

Semi-structured interviews with youth, older community members, community authorities, and external actors included questions tied to practical ideas and strategies that people think could

help make current forest-related work and governance structures more inclusive of young people. However, in order to collectively discuss key ideas raised by the research, and to identify practical strategies to integrate young people into forest use and management structures, a workshop was also organized in Analco, involving youth, community leadership and forest management technicians.

Workshops bring together a broader section of community members and are a good way to identify the range of ideas and perspectives held, disseminate information, and raise or address issues of importance and relevance to multiple interest groups. The workshop took place from August 28-30, 2019, and centred on middle schoolers. As well as in-class activities and discussions, students made a field visit to the community's forest. Themes covered during the three days included territorial recognition, forest management goals in Analco, valuing the different roles of community forestry, and examples of success stories from other forest communities in Mexico.

There was no similar workshop organized in Jalapa del Valle. However, as the community looked to embark on formal forest management for the first time, the communal authorities were keen for youth from its secondary school to visit another forest community to learn about forestry activities there and the types of work and benefits it can produce. On June 2 2019, students from the middle school "Escuela Telesecundaria: Guadalupe Hinojosa de Murat" visited the community forestry of Teococuilco, in Oaxaca's northern highlands. The trip was sponsored through my research funds and I attended the visit. The students learnt about Teococuilco's forest management process, and were encouraged to ask questions while visiting the different sites they were taken to. Following the field visit, students were asked about their experiences and to share their ideas about forest management for their own community.

3.4 Coding and Analysis

Interviews, focus groups, and workshops were audio-recorded (where participant consent was provided) and transcribed. Otherwise, notes were taken and written up later. Most audio-recording took place in community settings, either in people's homes or in community offices and public spaces. A number of audio-recorded interviews with external actors (NGO staff, government agencies) took place in their offices in and around Oaxaca City. Data from field notes and transcribed interviews were organized and coded using NVivo 12 software. I used a

more inductive approach to code the data I collected, with most codes derived or emergent from the things that people told me rather than through a pre-set coding scheme.

3.5 Limitations to Research

The research presented several limitations. One was time. I had four months in Oaxaca (mid-May to mid-September) to collect data, which precluded me from carrying out a strict comparative study. Rather, I focused most of my time in Analco, with Jalapa del Valle a secondary case that would provide a point of possible comparison and contrast. I had a lot of data to collect, and I needed support from the partner NGO, ERA, who were contracted to organize and facilitate both the visit of Jalapa youth to Teococuilco and the community workshop in Analco. That support made the planned research more feasible given the available time frame. Another limitation was the level of community member participation. The work was heavily reliant on community members being willing and available to participate, so I organized homestays in both study communities, which helped me to form relationships and made people more comfortable to speak with me. This was particularly the case in Analco, where I spent considerable time. The third main limitation was an inherent weakness of case study work. I worked in just two communities, so this precludes me from drawing firm conclusions about what is happening around youth engagement (and prospects for) in other forest communities in the same region or Mexico more broadly. Rather, as Maxwell and Chmiel (2014), Firestone (1993) and Polit and Beck (2010) have shown, in writing about empirical generalization, analytic generalization, and case-to-case transfer, the research and its findings do provide a base from which to speculate on current realities in such places and better understand how young people relate to communities and forests and the role they could play moving forward.

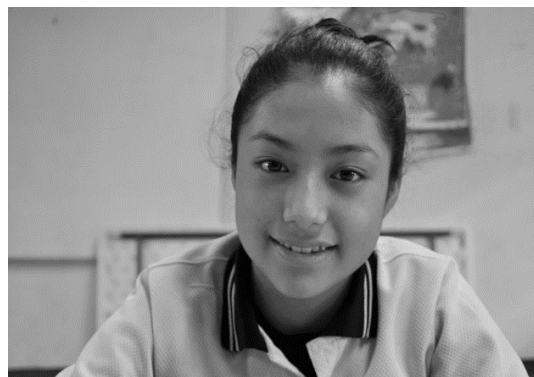
Finally, my ability to return to the two study communities (post-fieldwork) to present and discuss my findings have been put on hold because of the COVID-19 pandemic, and to also understand how their ongoing experience with the pandemic is impacting the issues and themes that I have been interested in. I am hopeful that a return will be possible later this year or early 2022 in order to fulfill my commitment with them to disseminate the products of this work.

CHAPTER FOUR

Results

Youth and Community

Chapter four presents key study findings in relation to Objective 1 of this research: *Explore the perspectives (and values) of youth in relation to community, community institutions, and forest resources.* This draws on interviews with youth from the two study communities, as well as other community members and “experts” who work with forest communities in Oaxaca.



Plates 4.1-4.6 Youth from Analco and Jalapa del Valle, Oaxaca.

The chapter is divided into three sections. The first section describes youth-held aspirations related to study, work and migration. The second section explores youth perspectives related to community institutions and their role in these arrangements. The third section explores the relationship between youth and local forests, including their knowledge of forest management and associated activities. This chapter provides the necessary context to exploring the current and potential role of youth in the community forestry sector (Objectives 2 and 3), which is the focus for Chapter 5.

4.1 Youth-held Aspirations

4.1.1 Youth and study

Thirty four young participants, between 14 and 29 years of age, were interviewed in San Juan Evangelista Analco and Jalapa del Valle. As Figure 4.1 shows, 14 participants, between 14 and 25 years of age, were attending school at the time, with the other 20 working.

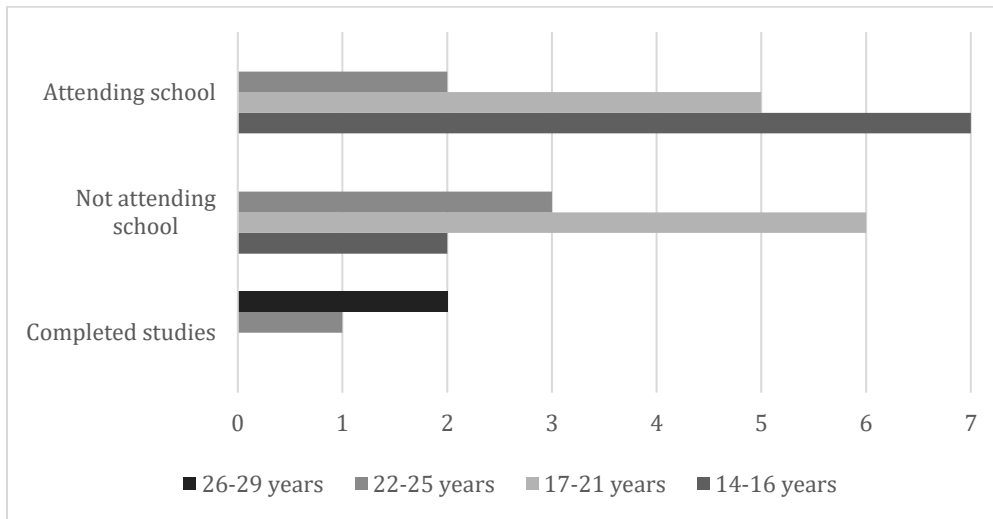


Figure 4.1. Educational status of youth across the two study communities

When asked whether they were interested to continue with their studies, a majority of youth across age groups answered in the affirmative (Figure 4.2).

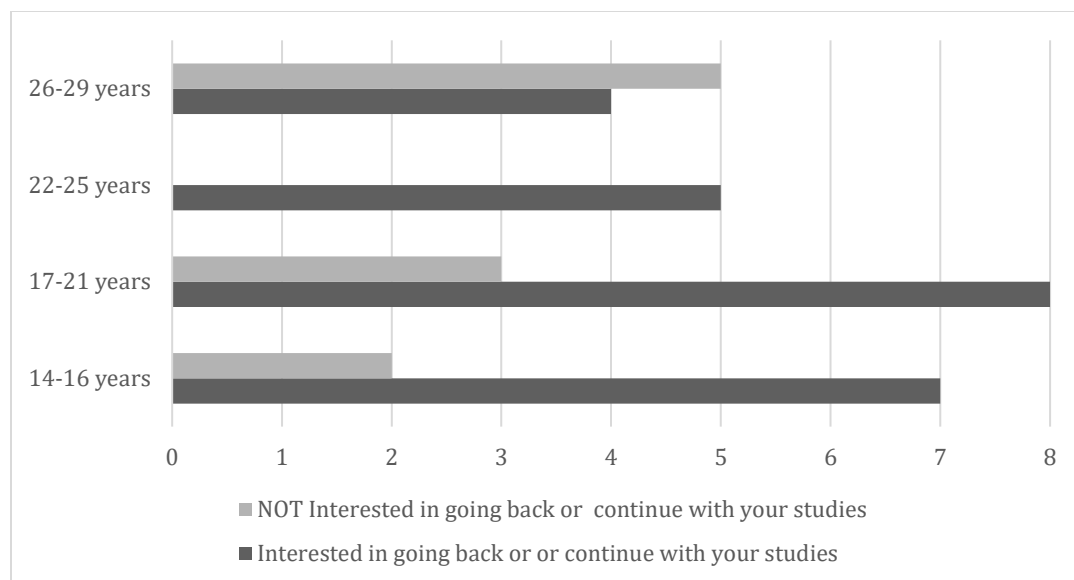


Figure 4.2. Youth-held study aspirations (across the two communities)

Study choices were often tied to career aspirations. As one 14 year old in Analco explained, *I would like to be a biologist, I would also like to be a teacher, but I would like even more special education or maybe history, I would like a career in that*⁶. For those hoping to study at a post-secondary institution, youth had a range of degrees in mind, from psychology to computer science, agricultural engineering, and law. It's important to note that not all shared such aspirations. One 14 year old male told me: *I don't know; maybe as soon as I finish middle school, I'm going to work as a bricklayer... and stay here in my town*⁷.

Among youth in the 17-21 and 22-25 age ranges, there was a mix of primary occupations; some were still studying or planning to, and others were already working or looking to work. In Analco, there were more youth in the latter category, while in Jalapa a slender majority (across these age ranges) were attending high school or university. Six were travelling daily or at weekends to Oaxaca City to attend college courses and university degrees in business engineering, computer science, forestry, nursing, and psychology. In both communities, only primary and middle schools are available locally, which means that young people must travel to

⁶ Me gustaría ser bióloga, también quisiera ser maestra, pero me gustaría más educación especial o igual me gusta la historia entonces igual, me gustaría alguna carrera con eso.

⁷ No lo sé, a lo mejor apenas termine la telesecundaria y empiece a trabajar de albañil... y quedarme aquí en mi pueblo.

continue their education. Given their proximity to Oaxaca City, this is easier for youth in Jalapa than Analco.

Of the nine participants aged 26 or older, none were studying at the time of the research, and two felt that their formal education was definitely over. Some expressed a degree of regret at not continuing on, but also reasons for not doing so:

*I feel a bit regretful that I did not finish high school, but here I have learned other things that I would not have seen in school, such as community responsibilities. I had a different way of seeing them, which has changed*⁸ (26 years old, male, Analco).

*Well, the truth is, I would like to, but right now with the family, it is a bit difficult. And, well, I say, with what I learned, with what little I know, I can already pay for the household expenses*⁹ (27 years old, male, Analco).

4.1.2 Youth and work

Of the 34 youth interviewed across the two communities, six were studying full-time with no paid work. Nine youth were combining studies with paid work (four in Analco and five in Jalapa). Those from Jalapa were studying in Oaxaca City and holding down part-time or temporary jobs within their community. 18 youth were not studying but working part- or full-time.

In Analco, youth were working as bricklayers, farmers, a community librarian, a computer technician a tractor driver, and in the community's charcoal enterprise, among other jobs (Figure 4.3. Farming was the most commonly-held occupation (seven participants), although it is often supplemented by other work. Bricklayer was the second most popular occupation (five participants). In Jalapa, youth worked in a slightly smaller number of jobs, including: bricklayer, baker, farmer, taxi driver, logger, grocery shop employee, forest technician, electrician, and plumber. Farming was not as prominent an activity (three participants). Notably, three youth were being temporarily hired as loggers, while the community's forest technician was himself young (26 years old). While no youth in Jalapa had jobs that were wholly based in Oaxaca City

⁸ Me siento un poco arrepentido de no haber terminado el bachillerato, pero aquí he aprendido otras cosas que no hubiera visto en la escuela, como las responsabilidades comunitarias. Tenía una forma distinta de verlas, eso ha cambiado.

⁹ Pues la verdad sí me gustaría, pero ahorita pues igual con la familia es un poco difícil. Y pues digo pues ya con lo que aprendemos, con lo que sabemos un poco, pues ya podemos solventar los gastos del hogar.

or elsewhere, those working in the trades (electrician/plumber, bricklaying) often travelled outside of their community for work.

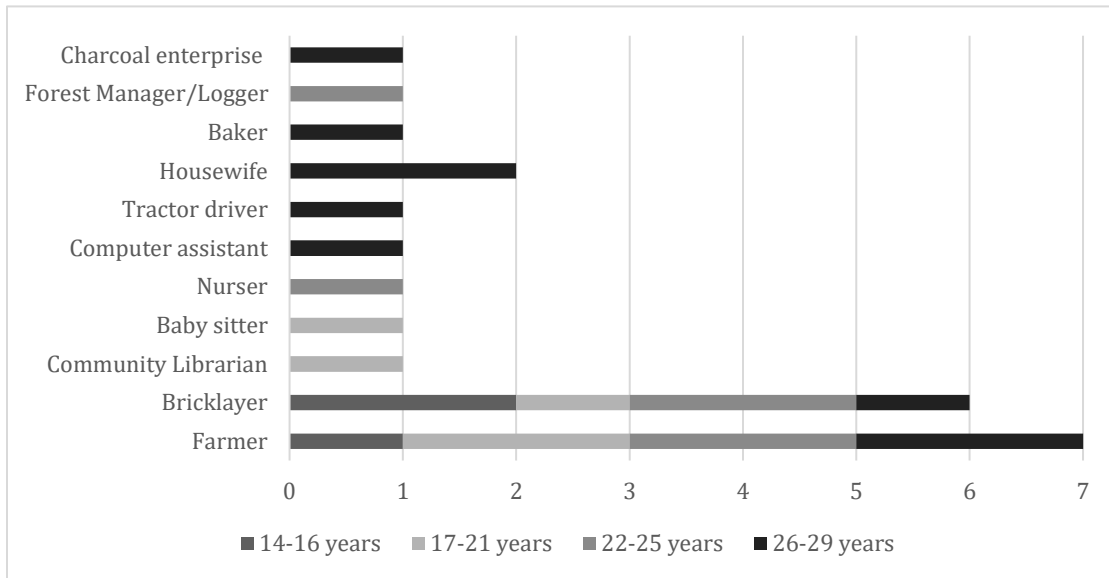


Figure 4.3. Current jobs held by youth interviewed in Analco

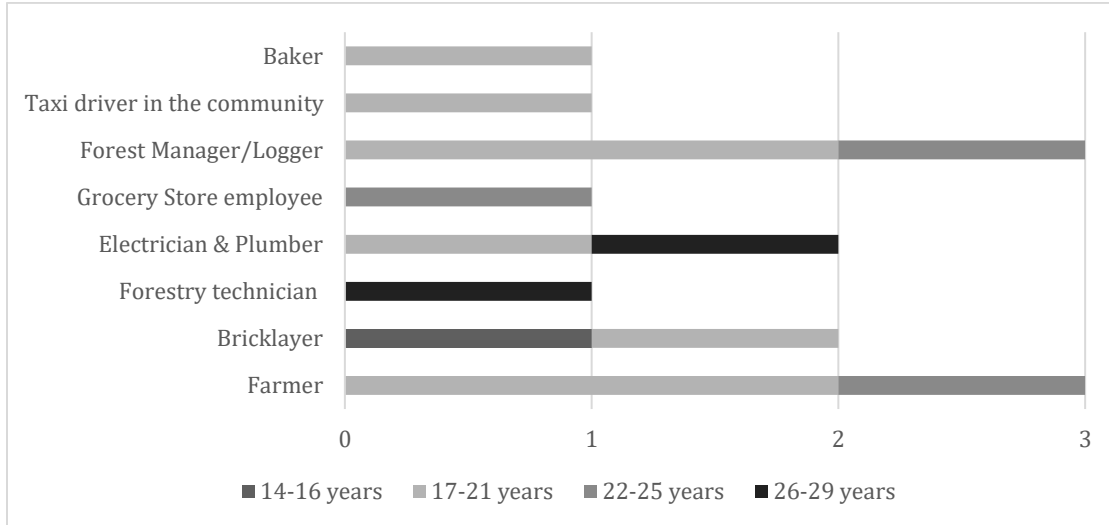


Figure 4.4. Current jobs held by youth interviewed in Jalapa del Valle

4.1.3 Youth, migration, and mobility

Study and work aspirations influenced youth-held plans around mobility and migration. In both Analco and Jalapa, more youth expected to leave their community (at least for a time) than those who didn't (Figure 4.5).

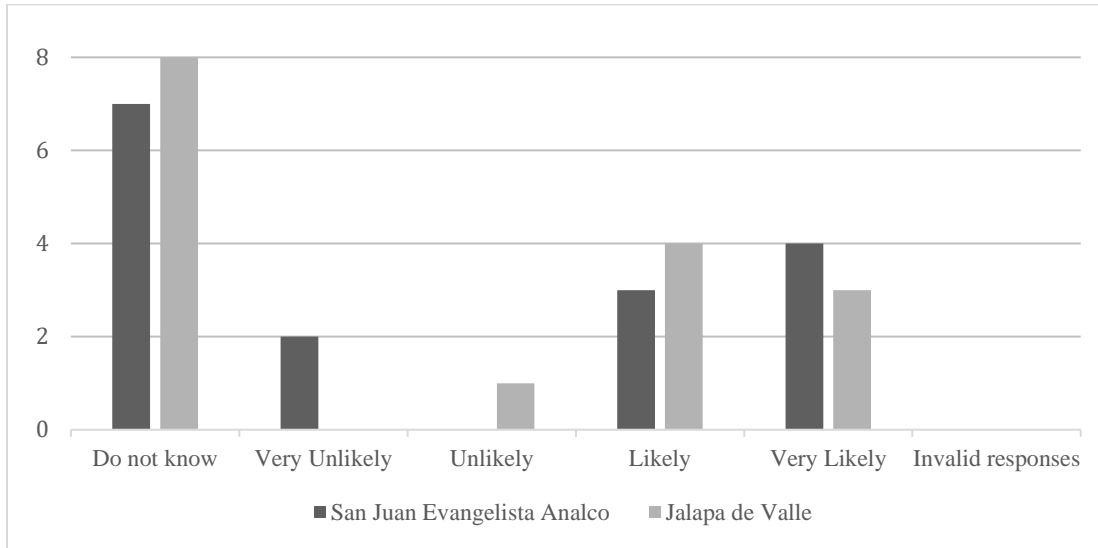


Figure 4.5 Likelihood of youth moving away from their community

This was deemed necessary to pursue career and study aspirations, with larger urban centres seen to offer more opportunities. However, interview data did point to differences between the two communities, with Jalapa's proximity to Oaxaca City enabling more youth there to consider having a job in the city while living in the community:

I really like the place where I live, the atmosphere and the tranquility where I have grown up. I do not like to think of living elsewhere. I believe that if in the future I can work in a hospital and be able to return here every day, I would do that. It is one of the reasons why I do not rent a room in the city while I study because I like the atmosphere here and although I have to travel for two hours, it is worth it. My thing is to stay here¹⁰ (20 years old, female, Nursing student, Jalapa del Valle).

While there are youth who plan to leave their communities, a significant number (15 of 34) did not know. Also, in both communities, a similar number said that they would like to stay or return

¹⁰ Me gusta mucho el lugar donde vivo, el ambiente y la tranquilidad donde he crecido. No me gusta pensar en vivir en otro lado. Yo creo que si en un futuro se puede trabajar en un hospital y poder regresar acá, pues yo lo haría. Es otra de las razones del porque no rento en la ciudad mientras estudio porque me gusta el ambiente acá y aunque yo tenga que viajar por dos horas, lo vale. Lo mio es quedarme aquí.

after being away – a third of youth (6 of 19) in Analco, and just under half (7 of 15) in Jalapa. This supports prior survey data (see Robson, Sosa Pérez and Sánchez Luja 2019; Robson et al. 2019) where 10 of 32 youth participants from Analco and Jalapa expected to be living in their home community when they were 30 years of age. Among youth that I interviewed, several had spent time living elsewhere, but had returned to their community. A 26 year old female told me how she was planning to return to Analco once she starts a family, so that her children could grow up there. This was tied to a perception that while cities may offer job and study opportunities, life there can be hard and dangerous.

While the trend was towards youth spending some time away from their community, it was notable that in both communities, there were youth who are not entertaining, or never did, the idea of leaving: *Since I was in sixth grade, my plan was not to study. Look, I never placed much importance on study... I always focused more on work in the countryside*¹¹ (29 years old, male, Analco).

For the youth who want to stay or plan to settle long-term in their community, several talked about what they needed from their communities in order to make that happen. The youngest saw improved access to technology as an important reason to stay; one middle schooler (male, 14 years old) aspired to become an engineer in informatics or computer science and wanted good online connectivity in his community so that he could work from home. A number of youth in Jalapa spoke about wanting better transportation links (buses, taxis, paved road) with Oaxaca City, so that they could more easily live in the community and commute to work in the state capital. Several young people, in both places, talked about wanting to run small businesses. In Analco, six participants had business ranging from a bakery to a butcher's shop, stationery store, car wash, grocery store, and a food stand. In Jalapa, two youth talked about starting a beauty salon and computer center respectively. They understood the challenge, however:

Maybe as a young man, I would like to start a business. I don't know, maybe a butcher shop, a grocery store, something that can improve in the future. But since it is still a

¹¹ Desde que yo iba en sexto de primaria mi plan ya no fue estudiar. Haz de cuenta, nunca le tomé mucha importancia al estudio. Siempre me enfoque más en campo.

*small town, we do not have enough people to start a business*¹² (29 years old, male, Farmer, Analco).

4.1.4 Congruence between youth-held aspirations and parents' perspectives

Parents that I spoke to provided opinions about their children's possible pathways. For the mothers of middle schoolers in Analco, while many would like their children to stay, they considered this unlikely because of limited livelihood opportunities. In addition, the lack of higher education institutions in the community or immediate region meant that most youth had to leave to continue their studies, which would then create new opportunities and reasons not to return. And these parents also noted how shifts in consumption patterns, combined with local environmental changes, made traditional land-based occupations less appealing or feasible:

*Previously, the land was worked a lot, and corn and beans were harvested. The inhabitants of the community planted more. Now the corn and beans are bought. It is difficult to visualize projects as before, and not even livestock is recommended because there is no pasture, due to the lack of water*¹³ (middle schooler's mom, Analco).

When asked about land-based opportunities other than farming, parents generally struggled to give examples, and those who did still envisioned difficulties:

*Yes, there are opportunities, but you have to look for them, for example, the land offers many opportunities that can be developed, but sometimes you don't have the money. Investing in a project is ideal because it is yours; even if you live in the city, you just survive there. There is nothing like having your own productive project. Moreover, I think some young people would be interested in staying here, having a project, and not leaving the community... I have the idea of putting up a greenhouse, but for me, it is a lot of money that would have to be invested, and I do not have it*¹⁴ (community member and father, 40 years old, Analco).

¹² A lo mejor como joven, me gustaría emprender un negocio. Yo qué sé, a lo mejor una carnicería, una tienda de abarrotes, algo que igual con el paso del tiempo y en un futuro vaya mejorando. Pero pues igual es un pueblo pequeño, pues no contamos con suficiente personas para emprender un negocio.

¹³ Antes se trabajaban mucho los terrenos y se cosechaba maíz, frijol, se sembraba más. Ahora todo esto se compra y esta cambiando. Es difícil ver proyectos como antes, tampoco la ganadería es tan recomendable porque ya no hay pastura, por la falta de agua.

¹⁴ Si hay oportunidades pero hay que buscarle mucho, por ejemplo en el campo hay muchas oportunidades que se puede desarrollar, pero a veces lo que te impide es la economía. Como la inversión en un proyecto, porque aunque vayas a la ciudad vives al día. No hay nada como tener un proyecto propio productivo. Y creo que hay algunos jóvenes que les interesaría quedarse aquí, tener un proyecto y no salir de la comunidad... Yo tengo la idea de poner un invernadero, pero para mí es mucho dinero.



Plate 4.7 Community member from the community of Analco.

Indeed, there was a sense among parents that leaving the community was something that their children needed to do. When asked whether by staying in the community, youth would be considered a “success,” no one answered clearly in the affirmative:

In my case, no, I would not see my children successful if they decided to stay within the community because my daughters went to study elsewhere. They are not studying to work here, so I don't see a future for them here in town¹⁵ (middle schooler's mom, Analco).

Maybe over time, yes, it will depend on what they study. They have to go out to study, and eventually, they could return to the community¹⁶ (middle schooler's mom, Analco).

This second quote pointed to an opinion held by many youths themselves, that *Yes* [you could settle here] *but first you have to get out¹⁷* (28 years old, female, Analco)

The idea that youth and their parents perceive of limited work opportunities locally, and parents are actively encouraging their children to look elsewhere, was a topic of concern to some

¹⁵ En mi caso no, yo no vería exitosos a mis hijos si decidieran quedarse dentro de la comunidad porque mis hijas salieron a estudiar a otro lado. Ellas no están estudiando para trabajar aquí, no les veo futuro aquí en el pueblo.

¹⁶ A lo mejor a través del tiempo sí, dependerá de lo que estudien. Tienen que salir a estudiar y con el tiempo pueden regresar a la comunidad

¹⁷ Yo creo que sí, primeramente, tienes que salir para que tú puedas traer aquí también nuevas ideas, porque si no conoces afuera no puedes traer nuevas ideas que se pueden acoplar a la comida

community forestry and rural development experts that I spoke to. Fermin Sosa, who is from Analco and runs a rural development NGO in Oaxaca, reflected:

The challenge is that we have to break paradigms because we keep thinking that rural development is as it has traditionally been seen, right? For example, if we go to Analco we will hear: And how am I going to live here? I can only plant corn, beans and nothing else... [that] that is how his father lived, that is how his grandfather lived and that maybe this is no longer interesting for the new generation [that] they [the youth] do not want to live like this¹⁸.

Francisco Chapela, of the NGO *Estudios Rurales y Asesoría*, concurred, noting how *They* [the youth] *want to have their own project, or be part of a project where they can dedicate themselves. There is that interest, but that project can be inside or outside, it doesn't matter* [to these youth]. Francisco saw hope, however, in the desire among some youth *To be in the community.... if those two things could come together* [desire to stay and meaningful work] *you could have good outcome*¹⁹.

4.2 Youth and Community Institutions

In thinking how youth might be empowered to adopt a more active role in community life, it was important to understand how involved they are currently and how they view the institutions around which so much of local work and decision-making are structured. Tsaani Villasante, from the *School for the Common Good* (EBC) project, located in Oaxaca City, believed that many youth felt alienated from such arrangements:

It is difficult to find young people whose goal is to be in their communities... they want to leave. One of the factors is that they are not interested in collective work or collective community work, their interests are more individual. Another one is that they also feel the need to go out to work or do something that pays them economically and immediately²⁰.

¹⁸ El reto está en que sí hay que romper paradigmas y hay que romper esquemas, porque seguimos pensando en que el desarrollo rural es como tradicionalmente se ha visto, ¿no?, que, por ejemplo, si vamos Analco decimos “¿Y de qué voy a vivir aquí? Si nada más puedo sembrar maíz, frijol y nada más, ahorita la carretera, y tener ganado”, de eso vivió su papá, de eso vivió su abuelo y eso a lo mejor a él ya no le interesa, no quieren vivir así.

¹⁹ Siento que hay ganas de tener un proyecto propio, o ser parte de un proyecto donde puedan ellos dedicarse. Hay ese interés, pero ese proyecto puede ser adentro o afuera, creo que no importa. Y por otro lado, hay entre muchos el gusto por la comunidad. Esas dos cosas se podrían juntar y convertirse en ganas de quedarse en la comunidad, pero no necesariamente.

²⁰ Es difícil encontrar jóvenes que su meta sea quedarse o estar en sus comunidades porque muchos se quieren ir, quieren salir. Entonces uno de los factores que creemos que han afectado es que no están interesados en trabajo colectivo o trabajo colectivo comunitario, que ya sus intereses son más individuales. Pues otra también es la necesidad de salir a trabajar o hacer algo que les reditúe económica e inmediatamente.

I wanted to know if that was case in the two study communities. Below, I look at levels of youth involvement and engagement in key community institutions, and identifies factors that might explain their relative commitment to these arrangements and associated processes.



Plate 4.8 Sign at the entrance of Jalapa del Valle: ‘Welcome to Jalapa del Valle, land of *usos y costumbres*’

4.2.1 Youth participation in cargos

Figure 4.6 shows the number and gender of youth who have held a *cargo*²¹ in their community. A *cargo* is a non-renumerated post within communal or civic governance that citizens are periodically asked to perform in return for continued full membership of the community.

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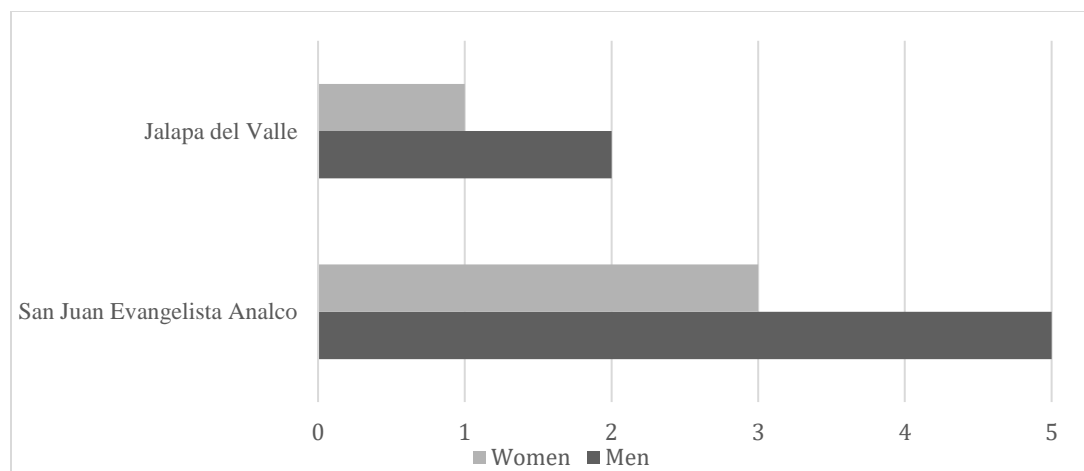


Figure 4.6 Number of youth who held a *cargo* at the time of their interview.

Of 34 youth interviewed, less than a third (10) had held a *cargo*. However, significantly more youth in Analco (8) than in Jalapa (3) had done so. In both communities, more boys than girls had held cargos. It should be noted that because community members are rarely given cargos before they turn 18, and those who are continuing with their studies are excused from such obligations, it is not a surprise that only a minority of youth in the two communities had had first-hand experience.

In Analco, eight youth had performed *cargo* roles in a range of civic and communal governance areas: Adviser to the Surveillance Committee (that includes forest management oversight), Secretary of the Surveillance Committee²², Clerk of the court of the Municipal Agency, Treasurer of the Municipal Agency, Councilman for Finance in the Municipal Agency, Secretary of the Municipal Agency, Councilwoman of Education and Elementary School Commissioner. In Jalapa, the three youth who performed cargos had done so in the areas of the Church Commission, Municipal Police, and *Topil* (messenger boy): *I made a cargo because my mother was ill; it was in the church. I had to clean and decorate the church, and it was my first cargo. I liked my cargo because it was every Sunday, so in the mornings the mass and in the afternoons*

²² According to SEDATU, the Surveillance Committee (Consejo de Vigilancia del Comisariado Ejidal o de Bienes Comunales), in accordance with article 36 of the Agrarian Law, is the body in charge of ensuring that the acts of the Commissioner for Communal Resources are in accordance with the Law and the Internal Regulations or Communal Statutes or the Assembly. Review the accounts and operations of the Commissioner for Communal Resources and make known to the Assembly the irregularities that it detects, call for Assembly when the Commissioner does not do it, and other tasks that the Internal Regulations or the Community Statute provide.

the children came because they gave catechism and I had to play with them (22 years old, female, Jalapa del Valle).

With regards to providing service to the community, a majority of older youth noted how taking up such responsibilities took up a lot of energy and time and can be challenging financially. A male interviewee (27 years old) complained that half of his time was given up for his community. Another talked at length about the burden of trying to balance community, work and family commitments:

Being a community member implies many responsibilities across community life. If they give us a service to do, we have to fulfill it, and we have to make tequios and attend assemblies. So sometimes, for a young person, it is not that the work is complicated, but it's hard to fit everything in ... I am single, and it could be seen as an advantage because I have time to participate, but at the same time to have so many responsibilities ... it's complicated²³ (28 years old, female, Analco).

Not all youth, however, took this line; one male youth from Analco arguing that his community should place *more* emphasis on service and to (re)build a sense of communal life – noting that many community members in their 40s and 50s were no longer interested in community work and that youth needed to take up the slack:

Community life is interesting. It seems boring, but it is interesting. At Analco, I have learned the way of community life, for example, assemblies, tequios, etc. are held. In the city, one does not learn that because there the concept of the community is not known. It is a value that our grandparents taught us. I want to stay here, and I would like to continue supporting my people through positions ... many leave the community to avoid doing their jobs and reject the option of helping, which makes me feel sad. Because it is welfare for the people and because here with the few people there are, sometimes they cannot cope, and there are no replacements to fill the cargos²⁴ (26 years old, male, Analco)

²³ Ser comunera implica muchas responsabilidades, dentro de la vida comunitaria y si nos dan un servicio pues tenemos que cumplirlo, hay que acudir a tequios, hay que acudir a asambleas, entonces a veces a la edad que uno tiene es como un poco, no complicado, pero sí a veces como cumplir con ciertas responsabilidades que todavía uno no lo asimila tan bien. Y más que no tengo familia todavía, soy soltera pues es por eso... Ser soltera es una ventaja que me da más tiempo de poder participar, pero a la vez también el tener tantas responsabilidades es un poco complicado.

²⁴ La vida comunitaria es interesante, parece aburrida, pero es interesante. En Analco he aprendido la forma de vida comunitaria, por ejemplo, como se realizan las asambleas, los tequios, etc. En la ciudad uno no aprende de eso porque allá no se sabe el concepto de lo comunitario. Es un valor que nos enseñaron los abuelos. A mi me gustaría quedarme aquí y me gustaría seguir apoyando a través de cargos a mi pueblo... Muchos se van de la comunidad para no hacer sus cargos y rechazan la opción de ayudar, eso me da tristeza. Porque es un bienestar para el pueblo y porque aca con la poca gente que hay, a veces no se dan abasto, y no hay relevos.

4.2.2 Youth participation in community assemblies

The Assembly (Asamblea) is the maximum authority in most rural Oaxacan communities. It is the space that brings together heads of households and rights-holders to discuss, debate, and deliberate upon issues of importance to the community, approve and oversee community-level projects, and to vote community members into cargos and leadership positions (across civic and communal authorities). As such, it's the opportunity for community members to make their voice heard.

In both communities, a small majority of youth (those over 17 years of age) had attended at least one community assembly (Figure 4.7).

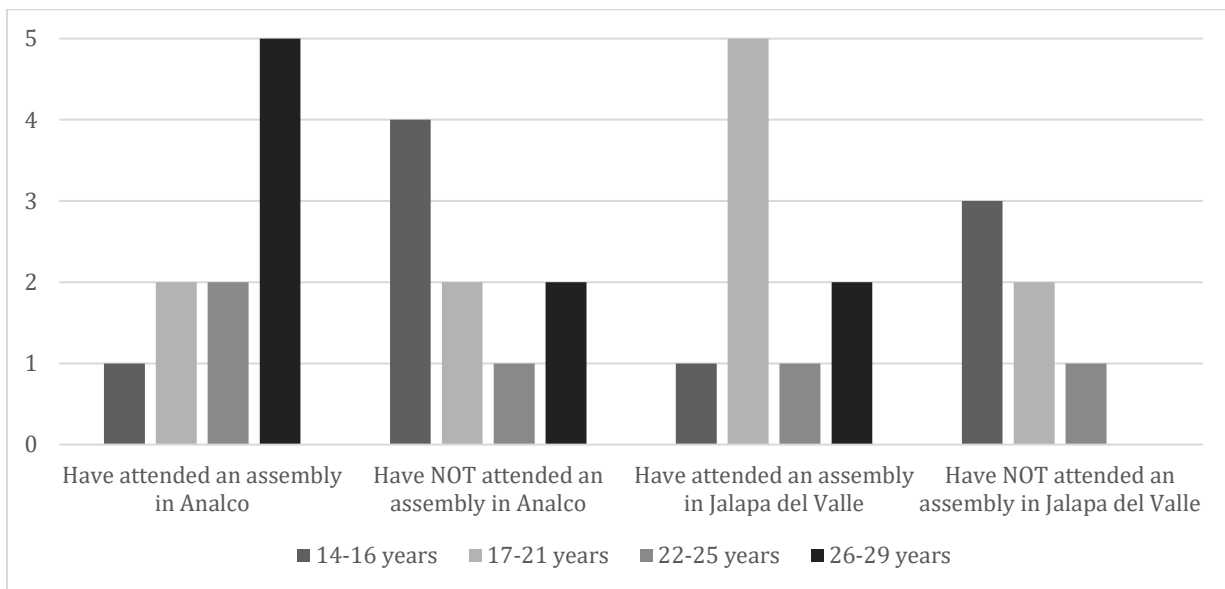


Figure 4.7 Degree of exposure to community assemblies among participating youth.

In Analco, nine of 19 interviewees had not yet done so and, of these, seven were female (ranging from 14 to 29 years of age). In Jalapa del Valle, six of 15 interviewees had not yet done so; three males (between 14 and 21 years of age) and three females (between 14 and 25 years of age).

In Analco, two older female youth (27-29 years of age) had learnt that understanding how the assembly (and decision-making process) works was part of their responsibility as community members, and that participation should be open to community members regardless of their

gender or membership status. In Jalapa del Valle, two younger youth reflected upon their first experiences going to an assembly:

We went to the assemblies to support the authorities and hear what other people say, those in favour, those who are against some things, and to discuss details. It was voluntary. We had never been to an assembly before, but we wanted to see how people reacted to the proposed new forest management plan²⁵

(21 year old, female, Jalapa del Valle)

However, not all youth were curious to get more involved. For example, one female interviewee (26 years old) from Analco was reticent to participate because she thought that this would be interpreted (by others in the community) to mean that she wanted to be more involved in the community and thus be given jobs (cargos) to do. She didn't want this because of her study plans and aspirations.

4.2.3 Do youth feel represented at a community level?

I asked youth whether they felt represented in the community assembly and associated decision-making (Figure 4.8).

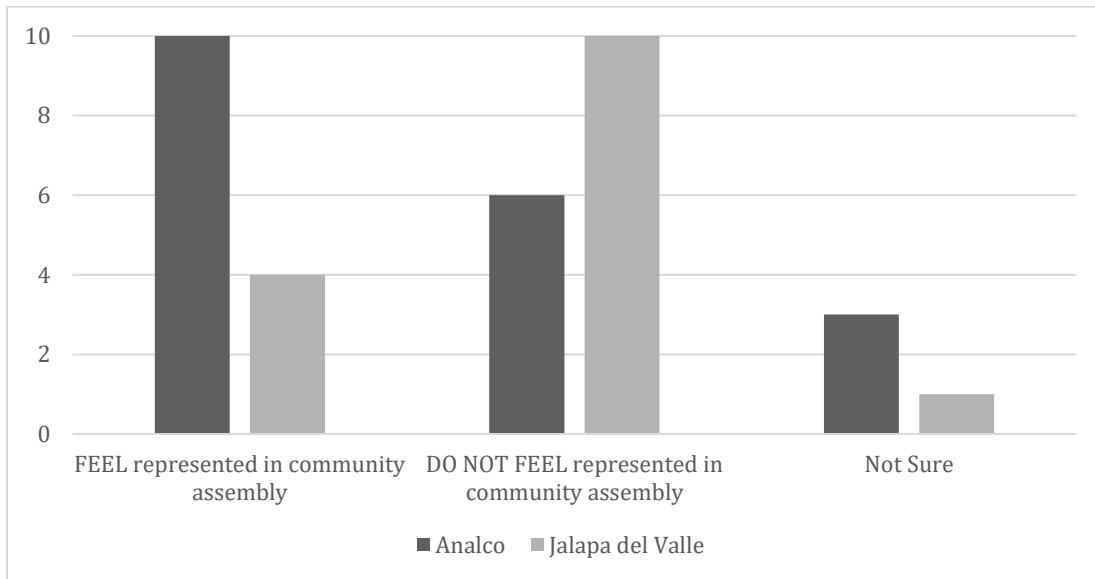


Figure 4.8: Sense of representation in community assemblies

²⁵ Nosotros fuimos a las asambleas para apoyar a las autoridades y escuchar lo que otra gente decía, quienes están a favor, y escuchar quienes están en contra y discutir detalles. Fue algo voluntario. Nunca habíamos ido a una asamblea antes, pero queríamos ver la reacción de la gente a la propuesta del nuevo manejo forestal.

In Analco, 10 of 19 youth said they felt represented, six did not, and three were not sure. Of the 10 who felt represented, seven were male and three were female. These were individuals who felt able to suggest ideas and ask questions in assemblies, especially if they were holding down cargos at the time. (two of whom were *comuneras*, recognized rights-holders) Some noted that there were older community members who would actively encourage them to participate:

*Well, I do feel represented. Maybe as young people, we do not have the experience adults have, but we still feel that they share that experience with us. There are times when they have told us: Well, you as young people contribute more. Maybe you have better ideas, better decisions, and at the end of the day, you are the ones who will stay tomorrow. They give us those spaces*²⁶ (29 years old, male, Farmer, Analco)

Honestly, few young people speak out because of the fear of having a wrong decision. In general, they let the adults speak, and they begin to take the experience, but if a young person stands up and gives their opinion, they are respected (28 years old, female, Analco)

Of the six who did not feel represented, five were female (between 14 and 27 years of age). For some, this was a function of them not attending assemblies. For others, they had attended assemblies but seen how women's opinions and roles are considered less important by some older men. Another noted that girls are rarely encouraged to make their own views heard – since traditionally it is the head of household (the father) who speaks at these meetings, with younger people (especially female youth) expected to stay quiet:

*I imagine that I could not comment or say something... I have also seen that sometimes there are women who stand up and give their opinions but they are not taken into account, or sometimes the [the others] laugh*²⁷ (26 years old, female, Analco)

*No... [you mean] as a young participant? No, because I do not go to the assemblies. I do not think the other young people who go either have a lot of voice and vote, but I am not sure*²⁸ (20 years old, female, Analco)

²⁶ Pues sí, porque, bueno a lo mejor como joven no tiene uno la experiencia que igual la gente adulta la tiene, pero igual sentimos que ellos nos compartan esa experiencia, igual hay veces que ellos han dicho, pues aporten, ustedes como jóvenes. A lo mejor ustedes tienen mejores propuestas, mejores decisiones, al final de cuenta ustedes son los que van a quedar el día de mañana. Nos dan esos espacios.

²⁷ Me imagino que por ese lado no puedo opinar o decir algo... También he visto que a veces hay mujeres que se levantan y opinan y que son tomadas muy poco en cuenta o a veces se ríen o cosas así.

²⁸ No, ¿Cómo joven? No, porque no voy a las asambleas. Los demás jóvenes que van tampoco creo que tengan, así como mucho voto, pero no se la verdad, no sé.

In Jalapa, less than a third of youth (4 of 15) interviewed felt represented in the assembly. Ten youth did not. Again, there was a sense that girls were less represented than boys. As the forest technician in Jalapa noted, *The women I work with are young. But there is still machismo within the community and they [the women] are put down*²⁹. This supported some of my observations in Analco. There, several inhabitants (both young and old) told me that women were now expected to attend assemblies and this would (or should) give them a greater voice and role in village affairs. However, several female youth still felt that they were looked down on by others because of their gender.



Plate 4.9 Female youth in Analco.

Finally, there was some conflicting information about how people are listened to depending on whether they have remained in the community or not. One youth felt that those who stayed in the community had greater voice than those who left for study or for work. But another interviewee observed how *Sometimes, young people who have studied outside the community are listened to more... [while] a young person who has a vision but has not left the community is rejected.*

²⁹ A veces los jóvenes que tienen estudios y que han salido del pueblo, son tomados en cuenta. En cambio, un joven que tiene visión pero no ha salido de aquí, recibe rechazo. Los jóvenes queremos darle un giro a Jalapa, por ejemplo, las mujeres con las que yo trabajo son jóvenes, también algunas son policías, pero aun existe el machismo y son relegadas.

4.2.3.1 Differences by age group

Figure 4.9 shows how perceptions of representativeness varied according to age; with two-thirds of older youth (26-29 years old) feeling represented compared to only one in nine among the youngest age group (14–16 years old).

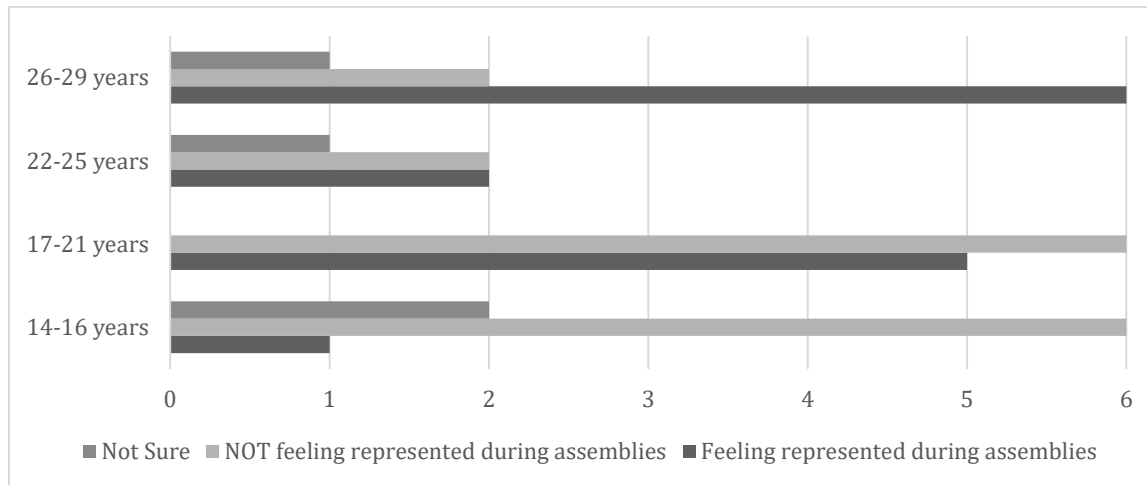


Figure 4.9 Perceptions of youth representation in community assemblies by age group.

In Jalapa, when the youngest participants were asked why they didn't feel represented, a commonly-cited response was, *I do not participate because they are going to say that I am just a boy and do not know*³⁰ (15 years old, male, Jalapa del Valle). In Analco, one of the younger interviewees cited a specific incident to show his frustration at not being listened to:

*One time, we asked for a roof for the basketball court, but someone told us no because the outsiders, those who are from the community but do not live in the community, said that the nice view would be blocked. They do not do what we want – many of the things that we would like to have or see, they ignore*³¹ (14 years old, male, Analco).

Among young people between 17 and 21 years of age, the split was more even; of the 11 interviewed, six did feel represented and five did not. In Jalapa del Valle, a clear majority (5 of 7) felt underrepresented, with the following quote pointing to a possible reason why:

³⁰ No participo porque dicen que uno es chamaco, no sabe.

³¹ Una vez pedimos que le pusieran techo a la cancha de basketball y unos dijeron que no, porque los de afuera, los que son de la comunidad pero que no viven en la comunidad, dijeron que se les iba a tapar la vista como a ellos les gusta. Luego no hacen lo que nosotros queremos, varias cosas que a nosotros nos gustaría tener, ellos la hacen a un lado.

They do not take you into account if you do not have a “cargo”... [but] I do not like it because I also live here. I think it is important to open the opportunity to participate for everyone³² (20 years old, female, Jalapa del Valle).

This was also picked up on by youth in Jalapa:

No, I cannot because I am not an ejidatario [rights-holder], and I am not serving with any “cargo”. You need to have a cargo to have an opinion. It is wrong that they do not let young people participate³³ (22 years old, male, Jalapa del Valle).

While not being given a voice was a source of frustration for some youth, who felt that they had lots to offer, there have been occasions when young people *were* consulted to solve a problem that the community was going through:

Once we had a conflict with another community, and they [community authorities] asked the young people how to solve things, because as young people we have another perspective, and there were several young people actively participating³⁴ (20 years old, male, Jalapa del Valle).

In general, it was among the older youth (22-29 age range) that I started to come across more who did feel represented in community spaces and decision-making. This is probably because youth living in the community once they are in their early twenties will be entering their “apprenticeship” as community members and participating more actively in key community institutions (such as serving cargos, doing tequios, and attending assemblies). In Analco, two youth in the 22-25 age range who felt represented were both fulfilling a *cargo* in the communal and municipal authority respectively. Among those in the older age range (26-29), eight were fulfilling a *cargo* or some other community-level position (i.e. forest technician). Of the two older youth who did not feel integrated or heard, neither had attended an assembly and only one had yet to hold a communal service position in the community.

³² No te toman en cuenta si no cumples un cargo, pero no me gusta porque también vivo aquí. Creo que es importante que se abra la oportunidad a participar para todos

³³ No porque no soy ejidatario y no estoy sirviendo con ningún cargo. Hay que pasar por un cargo para opinar. Es lo malo porque no dejan participar a los jóvenes.

³⁴ Una vez tuvimos un conflicto con otra comunidad, y nos preguntaron a los jóvenes como darles solución, porque como jóvenes tenemos otra perspectiva, y sí hubo varios jóvenes participando activamente.



Plate 4.10 Youth under the “carga” of Education Counsellor, Analco.

4.2.4 Changes that youth would like to see in their communities

In Analco, seven of 19 participants didn’t want to see major changes in the community. However, most did and expressed a range of ideas. Six wanted to see more job opportunities locally. Others focused on social norms and structure. A male interviewee, 16 years old, stated how he would *Like the community to be more organized. And respect for the authorities has been lost... I see this lack of respect in all ages, and I think that there must be respect so that the community can improve*³⁵.

Female participants, in particular, talked about how youth and gender intersect in the community. For one 26 year old female, a key change would be *That a woman is taken into account equally as a man... that there is gender equity*³⁶. Another 20 year old female believed that it was important that community leaders *Take the opinion of the young people more seriously, or that they allow us to participate and let us find out more about what is happening in the forest, how they work there, and in general I would like more information*³⁷.

³⁵ Me gustaría que la comunidad fuera mas organizada. Tambien se ha perdido el respeto hacia las autoridades. Esta falta de respeto la veo en todas las edades, y pienso que debe de haber un respeto para que el pueblo pueda mejorar.

³⁶ Un cambio sería que sean tomados igual en cuenta una mujer, que un hombre. Que haya equidad de género.

³⁷ Pues a lo mejor ese que tomaran más en cuenta la opinión de los jóvenes o que nos permitirán participar y que se enteraran más de lo que pasa en el monte, como lo trabajan y que hubiera más información.

There were a few participants who, having seen how things had changed in recent years, longed for a return to certain customary practices: *Most people no longer work the fields, but I would like everything to be as before. Previously, my parents told me that all people worked in the fields and were dedicated to livestock, but now, today, it is no longer like that. I would like to see that more* (29 years old, male, Analco). For others, change was inevitable and it was about adapting. For example, a female youth, 28 years old, felt that the community needed to work with the fact that community members are living in many different places, and it was important to encourage them to feel a part of things and be encouraged to return to the community. A 27 year old male, born and raised in Oaxaca City, but whose parents are from Analco, was cautious about such policies. While there was a genuine interest among first- and second- generation migrants to build a closer relationship with their home community, the environment towards “outsiders” can be hostile. He felt that positive change in that regard could only come through better and closer dialogue between both parties: *I would love to continue going to Analco, to continue visiting it, that is why I am interested in getting involved and knowing more, but sometimes the demands of people within the community stop me*³⁸.

In Jalapa, youth-held ideas about community were somewhat different. Only one participant said they liked their community as it was, with 13 talking about different changes that were needed. For five youth, being gossiped about and feeling judged turned them off from participating in community activities. As one 19 year old male told me, *I would like people to be more united because there are many people who whisper and create conflict*³⁹. An 18 year old female believed that if communication improved, it might allow for new ideas to be taken on board, for people to more readily accept change, and be more interested in participating. Besides improving the social context, youth from Jalapa lamented the lack of services in their community – from waste collection to cellphone and internet connectivity, medical services, transportation, a public library in the town, and a better water treatment system.

³⁸ A mi me encantaria seguir iendo a Analco, seguir visitandolo, por eso me interesa involucrarme y conocer mas, pero a veces la exigencia de la gente dentro de la comunidad me detiene

³⁹ Me gustaria que la gente fuera más unida porque hay mucha gente que habla y crean el conflicto.

4.3 Youth and Forests

In this final section, we explore the last part of Objective 1, which was to consider how youth in the two study communities currently connect to local forests. In doing so, it functions as a segue-way to Chapter 5 that looks at the role of youth in community forestry, both present and future.

4.3.1 Youth-forest connections

Youth in both communities were asked, *What do you like the most about the forest?* Their responses are summarised in Table 4.1.

Table 4.1 What youth like most about local forests

Reason	# of youth in Analco who mentioned this	# of youth in Jalapa who mentioned this
Peacefulness / Sense of tranquillity	12	6
Wildlife	5	6
Beauty	4	3
Sense of freedom	4	2
Trees and other plants	3	8
Smell	2	0
Sounds of nature	2	1
Fresh air	2	3
Cool climate	1	3
Space for family time and friends	1	2
Hiking on trails	1	0
Sense of happiness	0	2
Water	0	3
Reflects community work and “ <i>Convivencia</i> ”	1	3

For one 14 year-old from Analco, the forest made him feel *Free....free to do whatever I want and not listen to any noise... only the noise of nature!*⁴⁰. For a 20 year-old participant from Jalapa del Valle, the forest made her *Feel very calm because there is like a silence. And then if you go without making noise, the animals come out*⁴¹. Another youth, a 22 year old male, said, *I feel very calm, it is relaxing, I feel that I am finding myself and it gives me time to think about what I want and how I see myself in the future*⁴².

These observations point to strong, healthy and positive attachments that youth hold in relation to local forests. It was also notable that youth saw how community unity can be strengthened through having a shared connection to the forest. As one participant explained: *In the forest, even the food tastes better to us because it [the environment] is clean, beautiful and we are together*⁴³. Nevertheless, in Jalapa, some youth explained that it was becoming hard to visit the forest with friends and family because of poor road conditions. One participant said that she hadn't been to the forest in over a year, and she no longer felt such a strong connection.



4.11 Male youth taking part in a 'forest' *tequio* in Jalapa del Valle.

⁴⁰ Libre, de hacer lo que quiera, no escuchar ruido, solo el de la naturaleza

⁴¹ Me siento bien tranquila porque hay como un silencio. Y luego si vas sin hacer ruido, salen los animales.

⁴² No escuchas ningún sonido (a veces la motosierra). La vista es hermosa porque ves todo Oaxaca. Me siento muy tranquilo, es relajante, siento que estoy encontrándome conmigo mismo y me da tiempo de pensar sobre lo que quiero y como me veo en un futuro

⁴³ En el bosque incluso la comida sabe mejor porque esta limpio, es bonito y se convive.

Youth also spoke about the different services that forests provide (Table 4.2). As one male youth, 19 years old, in Jalapa del Valle commented: *From the forest, we get many benefits, water for example or air, plus there are animals and fruits. You can practically live in the forest without going to the city*⁴⁴. It was notable that when asked about the environmental importance of local forests, most talked about clean air and water or wildlife habitat, with fewer citing the role that forests play in combating global environmental crises such as climate change.

Table 4.2 Why are forests important?

Services and Benefits	# of youth in Analco who mentioned this	# of youth in Jalapa who mentioned this
Water	7	7
Oxygen	6	7
Climate regulation	4	4
Fertilizer	2	0
Space for recreation, leisure, and meditation	1	2
Inheritance of their children	1	1
Habitat for Animals and plants (trees)	1	6
Food	1	1
Flood control	1	0
Firewood	1	3
Erosion control	1	0
Local economic benefits	0	2

In terms of forest use and management, youth identified a wide variety of associated tasks and activities implemented by the community authorities (Fig. 4.10).

In general, most youth knew mainly about logging and reforestation and much less about other activities such as firebreaks and sanitation (post-logging). Among the youth who were

⁴⁴ Del bosque obtenemos muchos beneficios, el agua por ejemplo o el aire, además hay animalitos y frutas. Prácticamente uno puede vivir del bosque sin salir a la ciudad

particularly knowledgeable, several learned about forestry by participating in forest-based tequios and fulfilling cargos in the communal authorities. In Analco, the forest manager, who was 23 years old, talked about what he had learnt through the role. Another participant was appreciative of the local forestry technician for what he had taught her:

Because we went to the promoter, and he showed us that there were some nests where he said there were birds, which I did not know existed. He also told us that a new plant species was discovered here, and that is how we realize that our mountain has many things that we did not know about⁴⁵. (26 years old, female, Analco).

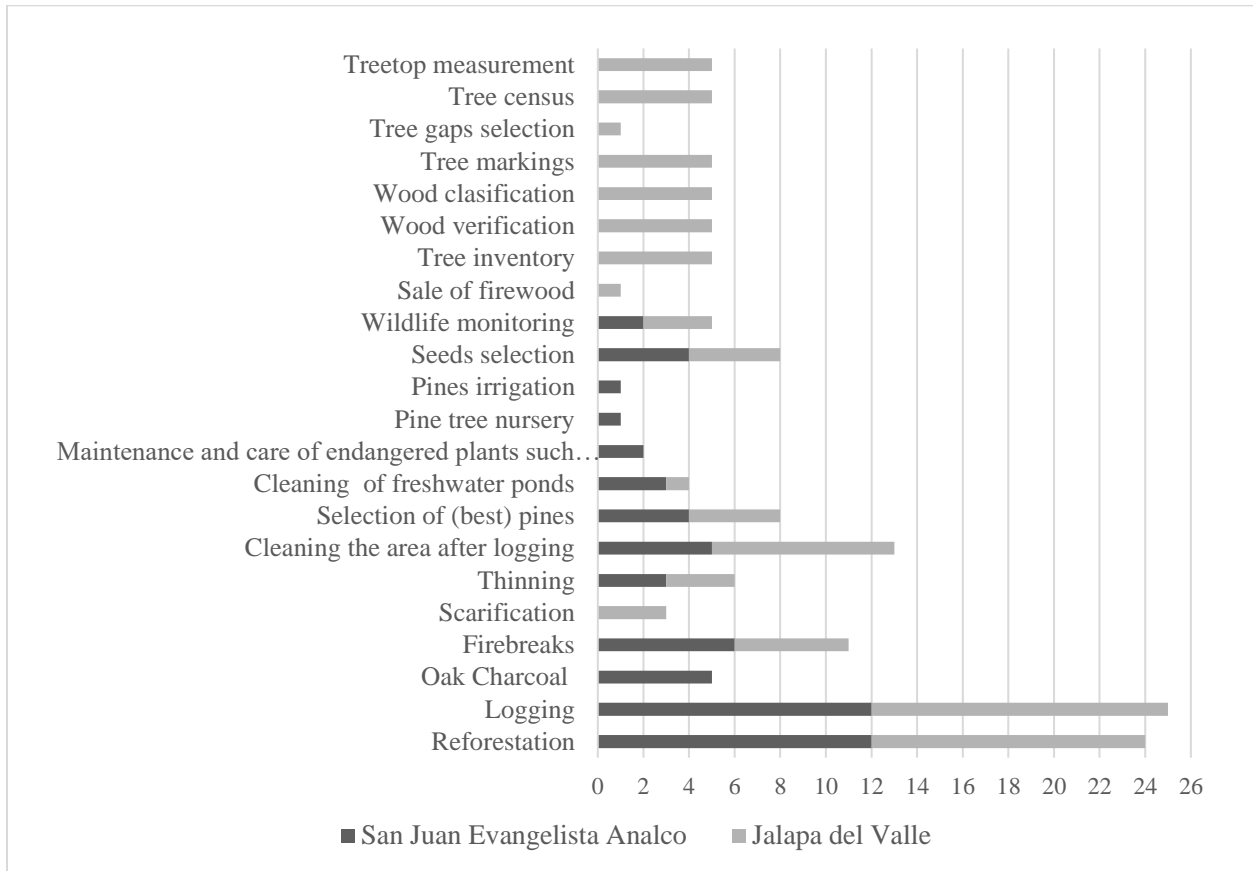


Figure 4.10 The activities that youth associated with forest management

In Jalapa, five youth (all in the 17-25 age range) had taken part in a forest inventory in 2018, which had been a formative experience. Four were currently involved in forest activities in the

⁴⁵ Pues porque fuimos con el promotor y vimos que había, bueno él nos enseñó señor que habían unas como tipo niditos donde dijo que ahí había ese tipo de aves, que yo no sabía que existía. También nos decía pues aquí también se descubrió una nueva especie de planta o no sé, pues así como que nos damos cuenta de que nuestro monte tiene demasiadas cosas, que nosotros no sabíamos.

community (as a forestry technician, as loggers, and as a forest manager), which gave them further knowledge.

The youngest age-group (14-16 years of age) struggled the most to give clear answers. In Analco, just two mentioned reforestation, one added logging and another said reforestation, logging and charcoal production. The one participant (male, 16 years old) who mentioned additional activities such as cleaning logged areas, seed selection, thinning, and making firebreak trails, was attending a Technical High School, where he specialized in agricultural technology. This included learning about forestry. In Jalapa, the situation was slightly different, in part because youth in the 14-16 age group had recently taken part in a sponsored visit to the forest community of Teococuilco de Marcos Pérez, Oaxaca, where they learnt about forest management activities in the community. Subsequently, two of those interviewed were able to talk in detail about reforestation, firebreaks, deforestation, scarification, and local and regional timber markets. One had also learnt about such activities through *tequios* they had attended.

4.4 Chapter Summary

The research showed how most youth who participated in this research are planning to leave their community – to work or, in many instances, to continue with their education. The desire among youth to find meaningful work, often after further study, poses a challenge to community leaderships. There is a perception that local work opportunities are limited – something that is perceived by both youth and their parents. However, while some youth will leave for good, the research found that a not insignificant number would like to stay or plan to return in the future. While the research did not find significant differences along gender lines, it did suggest that proximity to major urban centres (in this case, Oaxaca City) can help youth to potentially meet work and study aspirations while remaining resident in their home community.

The above trends provide important pointers to community leaderships as they plan for the future. Youth showed strong connections to their communities, and appreciated them for what they offer. They held positive attachments to communal territories and local forests. However, their knowledge about forests and forest management was limited, with those under the age of 18 less knowledgeable. Integration into village life and institutions was most evident among older youth (over 20 years of age) and among males rather than females. Older male youth were the most likely to have filled *cargo* positions, attended assemblies, and taken in community

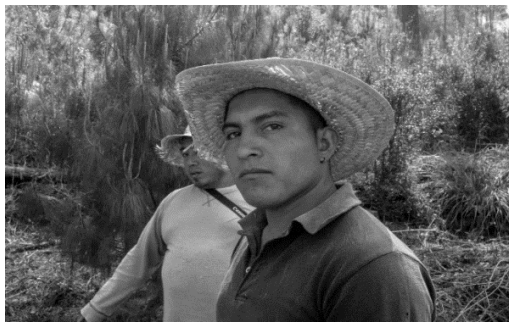
(including forest-based) tequios. This ‘apprenticeship’ is likely to have given them greater insights into and opinion about their communities. Older youth were most likely to question local governance institutions, which demand time and energy from community members, making it harder to fulfill individual aspirations.

CHAPTER FIVE

Results

A Role for Youth in Community Forestry?

Chapter five presents findings related to Objectives 2 and 3 of the research; to investigate current levels of youth involvement in community forestry and strategies to increase that role. Data come from interviews with youth and other community members in Analco and Jalapa, as well as “experts” who support and study the community forestry sector in Oaxaca, and from participation observation of community workshops, “tequios”, and middle school activities.



Plates 5.1-5.6 Youth from the two communities participating in forest-based activities.

The chapter is divided into three main sections. The first describes youth-expressed interest in and ideas for forest-related work and livelihoods. The second details current and planned strategies to enhance youth engagement and involvement in community forestry. A third section explores youth-, community-, and outsider-perspectives with regards to what the future holds.

5.1 Youth-held Interest in Forest-related Work and Livelihoods

5.1.1 Youth interest in forestry activities

Youth were asked if they would be interested in working in their communities. In Analco, 12 expressed an interest, with eight already having a permanent or temporary job. The majority were not clear or non-committal (“it depends”) as to what kind of work interested them, and several had doubts about this being realistic – either their aspirations didn’t easily match what the community currently offers or they remain curious about working and living elsewhere. As one 27-year-old told me: *Well, the truth is, I currently have a good job within the community, but now I have the opportunity to do the same [kind of work] but in the city of Oaxaca and learn other things*⁴⁶. In Jalapa del Valle, a similar set of responses were observed. Of 15 participants, nine said, “yes”, they were interested in working in the community but with a caveat (i.e., *if I could find an opportunity*). Several couldn’t easily imagine a meaningful career within the community. However, what was notable across the two communities is that not one of the 34 participants responded with a categorical “no”. Also, there was no discernible difference in responses between male and female youth.

The same youth were then asked whether they would be (potentially) interested in working in activities related to the forest, with the aggregate results provided in Figure 5.1.

⁴⁶ Pues la verdad sí, yo actualmente tengo un trabajo dentro de la comunidad, pero pues actualmente tengo la oportunidad de hacer lo mismo, pero en la ciudad de Oaxaca y aprender otras cosas más todavía.

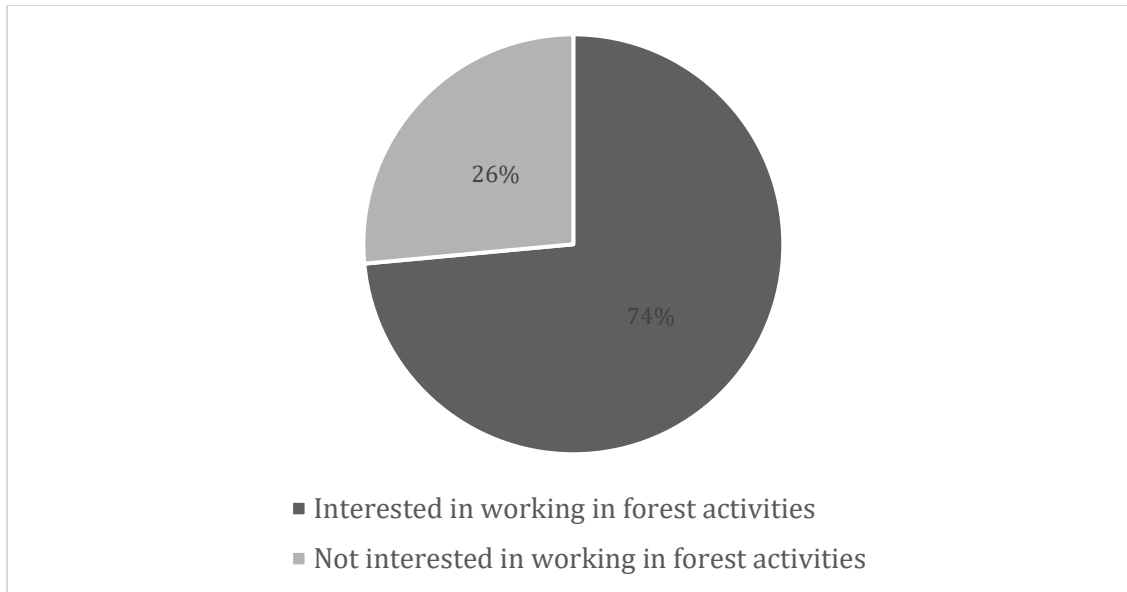


Figure 5.1 Youth interest in forest-related work

Two-thirds said they would be interested, again with no difference in response between males and females.

In Analco, of the five participants not interested in forest-related work, the youngest two said the work is too physically demanding, while the eldest two cited time demands – *My career is too demanding, so I do not have time for anything else*, 23 year old, female) – or simply a lack of interest: *It is not what I like* (27 year old, male). For 14 (of 19 respondents) who had interest in forest work and related activities, most said it was hard to envision meaningful opportunities being open to them within the sector:

Yes, the truth is, I would like to go to reforest and do other activities in the forest, but my parents do not let me do that work much, and they [referring to school and parents] do not take us much to the forest either⁴⁷
 (14 years old, female, Analco)

Yes, of course, I would like to be more involved, but I do not know, I do not know what activity I would like to do, but I am interested in being more involved in reforestation and all that they are doing because I have not been fully involved⁴⁸
 (21 years old, male Analco)

⁴⁷ Sí, la verdad sí me gustaría ir a reforestar y hacer otras actividades en el bosque, pero mis papás no me dejan mucho que haga ese trabajo y no nos llevan mucho.

⁴⁸ Sí claro que me gustaría estar más involucra, pero pues no sé, no sé que actividad sería, pero sí me gustaría estar como estar más metido en todo eso de la reforestación, todo lo que están haciendo porque no he estado de lleno.

Some even felt that getting involved in forest activities was part of their duty as community members: *Yes, that would be fine... well, if I am going to stay here, I must be there* [working in the forest] ..⁴⁹ (20 years old, female, Jalapa del Valle). A few youth even had a particular forestry-related activity that they would like to master: *I would like to learn how to select the right tree to pick the seeds because I do not have the knowledge to do it* (18 years old, male, Analco).

It was notable that some of the older youth talked about having been involved in forest activities, and how those experiences had led to an interest in pursuing similar opportunities:

*It is nice, and I would like to do it again. They hired us to make the forest look clean. We chopped the branches, and then we separated the firewood, and we tried to make sure that everything was in order, that the firewood was not lying everywhere. If there were felling trees, our task was that that place would be cleaned entirely so that the selected trees could throw the seed. Cleaning the land, removing the compost, those were the tasks that we did*⁵⁰
(28 years old, female, Analco).

For one 23-year-old, his exposure to forest-related work has influenced his subsequent career plans:

*Look, I would like to be a technician, a forestry technician. The forestry technician helps young people who are just starting like me. For example, I did not know anything about Analco's forest and, well, the forestry technician taught us through courses, and he also supports us with tours, he joined us during the visits to permanent sites, and more, right? So I want to do that too*⁵¹.

A 28 year-old female from Analco hoped for the chance to stay involved in the community's charcoal enterprise once her *cargo* duties are completed, *Look, I want this project to work and*

⁴⁹ Sí, estaría bien por lo que bueno, si pienso quedarme acá tengo que estar ahí, pues..

⁵⁰ Nos llevaban a limpiar el monte a ayudar a que se viera más limpio. Entonces nosotros picábamos las ramas, separábamos la leña, tratamos de que estuviera todo en orden, que no estuvieran tirados las leñas. O sea, cuando había derribo de árboles nuestra labor era que este lugar donde hubo derribó se limpiaría totalmente para que pudieran los árboles padres tirar la semilla, limpiar la tierra, quitar el abono, esa eran las partes que nosotros hacíamos.

⁵¹ Pues mira a mí me gustaría ser un promotor, promotor forestal. El promotor forestal lo que hace es ayudar a los jóvenes, que apenas van empezando, más que nada, como mi persona. Yo soy joven y pues tenemos a un promotor forestal a donde él nos ayuda, pues a caminar ¿No? Por ejemplo, yo no sabía nada de lo de esto forestal y pues ya, el promotor forestal nos da cursos, y pues él igualmente nos apoya con recorridos, igualmente sobre los sitios permanentes, pues así esas cosas ¿no? Yo quiero hacer eso también.

keep moving [forward] because I want to stay here if those conditions exist”, before adding, “but if not, then I will have to think about leaving⁵².

A similar scenario was evident in Jalapa, where 11 of 15 youth said they were potentially interested in forestry work and activities, and four were not. There was less interest among the youngest participants; for a 16-year-old, forest work looked boring, while for a 14-year-old, already working as a bricklayer, he wanted the chance to work in other communities. Jalapa was notable for a group of 17-21-year-olds who saw forest work as an attractive livelihood option. At least three among this group had been involved in previous forest management activities (see Chapter 4), which had come to shape their current views. A 20 year old female participant, for example, noted that while her *Professional aspirations are [to] work in a hospital... If I enjoy and appreciate the forest, I should also work to maintain it⁵³*. For a 17 year old male, *New projects like one in ecotourism are coming, and they look interesting... we are excited to participate*. This kind of outlook remained among several of the older youth (22-29 year olds), with several working in forest management at the time of their interviews – experiences that had motivated them to keep working in the sector and, for one at least, to feel a part of the collective: *Working on these projects helps me get to know and get more involved with the community. Before, I did not know many people from here⁵⁴* (22 years old, male).

5.1.2 Youth-held ideas for forest-related projects and initiatives

During interviews, youth were asked for their ideas for forest-related projects and initiatives. A summary of their responses are provided in Table 5.1. Youth-held ideas were varied. While reforestation activities were popular in Analco (4), along with Forest Maintenance and Cleaning (3), the most-cited ideas in Jalapa related to Solid Waste Education (4) and Forest Conservation and Environmental Awareness (4). As one former forest manager told me, *I would like all the children in the community to learn about forest management. All the elementary and middle*

⁵² Ahorita pretendo que este proyecto funcione y siga adelante y quiero seguir permaneciendo ahí, sí las condiciones se dan, y si no pues ya tendré que salir fuera

⁵³ Yo quiero trabajar en un hospital y pues aquí en la comunidad no hay, pero si el bosque es algo que disfruto y aprecio demasiado, creo que debería también trabajar en su cuidado.

⁵⁴ Trabajar en esto me ha ayudado a conocer e involucrarme mas con la comunidad. Antes yo no conocía a mucha gente de aquí de la comunidad.

school children should know what forest management is and know how to take care of our mountains⁵⁵.

Table 5.1 Forest-related project ideas proposed by youth

Idea or Proposal	# of times suggested by youth in Jalapa	# of times suggested by youth in Analco
Reforestation	2	4
Forest Maintenance and Cleaning	0	3
Fruit Orchards	1	2
Forest Pest Management Workshops	1	2
Raising Awareness of Forest-Water Linkages	0	1
Farming Plots for Youth	1	2
Youth forest conservation brigades	0	1
Education on Solid Waste Management	4	1
Forest Conservation / Environmental Awareness	4	1
Modernization of local agriculture	1	0
Vermicompost (for sale)	1	0
Honey Production	1	0
Forest-sourced Fertilizer or Compost	1	0
Mushroom Farming	1	0
Wildlife Monitoring	1	0
Maintaining Forest Streams	1	1
Forest Pharmacy: Medicinal Plants	1	0
Forest Germplasm Conservation Project	1	0
Crafts made with leftover wood	2	0
<i># of youth who put forth no idea or proposal</i>	3	10

Some but not all of the younger participants (14-16 years old) offered ideas, ranging from farming plots for youth to (youth) forest conservations brigades. It was notable that several of those who contributed multiple ideas were attending forestry technical school or had held a

⁵⁵ A mí me gustaría de qué todos los niños de la comunidad aprendan sobre manejo forestal. Que todos los niños de la primaria, y la secundaria sepan lo que es un manejo forestal, y así sepan cuidar nuestro monte.

cargo within the Office of the Comisariado de Bienes Comunales (Common Property Commissioner).

Despite coming up with a wide number of proposals, it should be noted that several youth had little to offer. This was most evident in Analco, where 10 of 19 youth provided no ideas (versus three of 15 in the case of Jalapa). This may reflect the two communities' current situations.

While Analco has been heavily involved and invested in formal forest management since 2013 (through which it has already established or experimented with different practices), forestry in Jalapa is a novel development opportunity – people there are still debating what the sector could or should look like. Youth are aware of this, and so the research may have represented an opportune time to engage them on forest-related topics. This is something I will return to in Chapter 6.

While they had not offered much in their individual interviews, middle schoolers in Analco (14-16 year olds) had more to say during the forest workshop (mentioned previously in Chapter 4). As part of that event, they talked about the forest activities that most interested them (reforestation, pruning, disposal of wood residues) and longer-term projects that they wanted to see established (sawmill and furniture manufacturing, hiking trails and forest visits as part of ecotourism venture, and a pine resin enterprise).



Plate 5.7 Two middle school students during the Analco's Workshop in August 2019.

Training, in particular, was something that youth wanted to see – to learn specific forest management tasks, to be able to recognize local flora and fauna (including endangered species), and to set up and operate camera-traps. Another idea was to have a monthly “youth tequio” in the community, which would be organized by middle school students but include younger participants from elementary as well.

5.1.3 Perspectives from community leaders and community forestry practitioners

According to a number of the academic, NGO, and government experts working in or supporting community forestry, and who participated in this research, the CF sector could provide significant work opportunities for young people. From the interviews conducted, a wide array of jobs were specified; from reforestation work to pest control, environmental education, ecotourism, agave management, oak charcoal production, copal management, non-timber forest products (palms, resins, mushrooms), logging, and marketing, among others. In a similar vein, the communal authorities in both communities recognized the role of young people in the forest management sector and their potential to help meet current and projected work demands:

It is very important for us, that we have a large area of forest, and we have the need for technical advice, that young people get training in this and take the lead⁵⁶
(President, Communal Authority, Jalapa del Valle).

Right now, the community is growing, it is generating alternatives to be able to live within the community, and one of the great opportunities is thanks to the forest. Forest management is generating opportunities. For example, we have a community forestry technician, who year after year, has been supporting us with management activities to such an extent that he is now an expert. He also supports us as a tour guide. He has developed many skills. And we would like to have more young people like him⁵⁷.
(President, Communal Authority, Analco)

However, as the president in Analco went on to note, *There is also little interest among young people*, and so it is not clear that youth themselves are thinking along the same lines as those promoting what the sector offers. Also, and as noted previously (section 5.1), few youth were

⁵⁶ Es muy importante para nosotros, que contamos con un gran bosque y tenemos esa necesidad de asesoramiento técnico, que los jóvenes se vayan preparando en esa línea.

⁵⁷ Ahorita la comunidad esta creciendo, esta generando alternativas para poder vivir dentro de la comunidad y una de las grandes oportunidades se esta abriendo a través del bosque, del manejo forestal, se están generando oportunidades. Por ejemplo, tenemos un promotor forestal de la comunidad, que año, con año, nos ha estado apoyando con actividades del manejo a tal grado que ahora ya es un experto, y nos apoya también como guía de turismo. Ha desarrollado muchas capacidades, habilidades. Y quisieramos tener mas jóvenes como el, pero también hay poco interés por parte de los jóvenes.

specific about what they wanted to do or were interested in with regards to forest-related work. While reforestation was often mentioned, especially among younger participants, such activities do not easily equate to regular let alone well-paid work. While most youth participating in this research valued forests and forest activities, few made clear that they see the forest sector as an obvious livelihood opportunity or pathway.

Some of the ‘experts’ I spoke to picked up on this apparent mismatch between sector potential and youth aspirations. As Yolanda Lara of Estudios Rurales y Asesoría Campesina, A.C. explained:

...During the 35 years that community forest management has been in Mexico, there has been a lot of emphasis on community enterprises... but right now, with generational change, many young people are no longer directly involved in community-level management. I feel that the way of perceiving the forest and community forest management has to change. Community forest management has to evolve into new forms that allow sectors, who are being left out, to generate opportunities from the forest resources...⁵⁸

She felt greater knowledge mobilization and education was essential to bring more youth into the fold. Francisco Rosas, a forester hired by Analco, concurred:

Technical forest providers should also provide environmental education to the communities where they work... and with that, attract those who might be interested, because I feel their [apparent] lack of interest is because they don't really know what forest management involves⁵⁹.

When asked whether youth needed to be (explicitly) shown the opportunities that forestry could offer, Francisco Chapela of Estudios Rurales y Asesoría Campesina, A.C. said, *Yes, or support*

⁵⁸ Durante los 35 años que lleva el manejo forestal comunitario en México, pues ha habido mucho énfasis en las empresas comunales, y yo creo que, con buenas razones, no digo que haya estado mal, pero ahorita con el cambio generacional que implica que muchos de los jóvenes ya no están involucrados directamente en lo que es la gestión comunitaria, este, pues yo siento que ya tiene que cambiar la forma de percibir al bosque y al manejo forestal comunitario. Yo creo que el manejo forestal comunitario tiene que evolucionar hacia nuevas formas que permitan que otros sectores de las comunidades, que se están quedando fuera de los aprovechamientos pues puedan generar oportunidades a partir del recurso forestal.

⁵⁹ ...También por parte de los prestadores de servicios técnicos forestales deberían de dar una mayor educación ambiental hacia las comunidades. No solamente prestar servicios técnicos, sino también desarrollar como un servicio de Educación Ambiental hacia la propia comunidad y con ello pues captar a la gente que se interese, porque yo siento que el hecho de que no se interesen, es porque no saben bien realmente lo que involucra el manejo forestal en las comunidades.

*them to go and find [these] things out for themselves. I mean, to do it alone... [although] alone it's really complicated*⁶⁰.

5.2 Current and Planned strategies to Enhance Youth Engagement

5.2.1 Strategies to-date

To date, the two communities have (sometimes intentionally, sometimes not) used certain community development spaces, strategies or initiatives to help youth become more familiar with and interested in forest-related activities. These are *tequios*, training workshops, community visits, and learning exchanges. I look at each in turn.

5.2.1.1 Tequios

For both communities, the *tequio* is an essential part of village life; both in terms of enacting one's commitment to the community but also for the very practical reason of getting things done. By participating in *tequios*, youth become an active cog in the community sphere, not just the daughters and sons of rights-holders. According to a number of research participants, *tequios* have the potential to function as a space to enable youth to become more involved with forest-related activities. In forestry communities with forest management, *tequios* are regularly organized (weekly or biweekly or monthly) by the communal authorities to undertake forest- and other land-based activities and get needed work completed. When called, all comuneros (rights-holders) are expected to attend.



Plate 5.8 Message on wall that reads *Tequio: collective work for the community*'

⁶⁰ Sí, o apoyarlos para que las exploren. O sea, solitos, solitos está canijo.

Of the 34 youth who participated in this research, 24 said that they regularly participate in *tequios*, while nine had never participated and three rarely (Fig 5.2). Age did not appear a determining factor in level of participation; younger participants (14-16 years old) often attended *tequios* when their parents could not and someone (from the household) must go. As a female participant 16-year-old from Jalapa del Valle explained, *I attend the tequio while my dad is with the animals*. For many older youth, participation is tied to their emerging duties as *comuneros*.

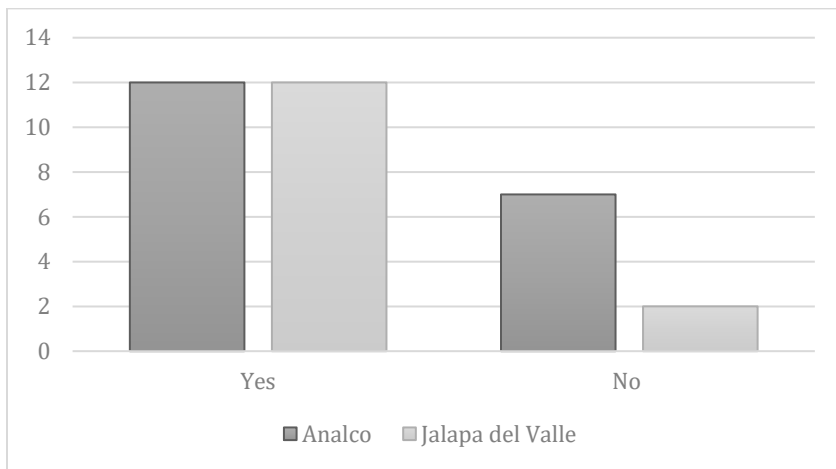


Figure 5.2 Youth participation in community *tequios*.

However, while age did not affect participation levels, gender did (Fig 5.3). Of 34 participants, 17 males and 8 females answered “yes”, while 8 females and only 1 male said “no”.

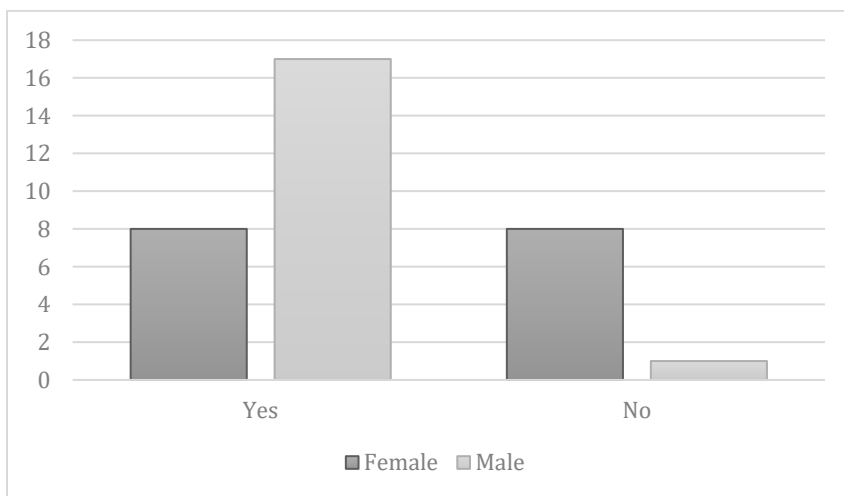


Figure 5.3 Youth participation in *tequios* by gender in both communities.

This was more marked in Analco; of 11 youth who attended tequios, nine were male, and only two were female. In Jalapa, the split was more even (seven male vs. five female).

While participation in tequios was reasonably high among youth (and more so in Jalapa than in Analco), to date, tequios have not been organized in either community to explicitly target youth or youth engagement in land-based activities and development.

5.2.1.2 Training

The two communities have been more intentional in youth engagement through efforts around community forestry job creation, organizing educational visits (to community forests), and training workshops.

A number of older youth (over 20 years of age) have been given temporary work in the local forest sector. In Analco, between 2014 and 2017, youth got (paid) work experience thinning pines, creating fire breaks, and pruning. Several youth in Jalapa participated in a forest inventory in 2018, which was supported by CONAFOR and ERA. Some of these individuals were (at the time of the research) employed in new forestry activities the community has started.

These opportunities were appreciative by the youth involved:

Yes, I would like to get more involved because it is nice, in fact, there was a time when they [local authorities] gave temporary employment, and I went when I was on vacation... and it was to go to take care of the small pines that grow on their own, to clean around them so they could continue growing. Then also to pruning and all that ... and I liked to go then yes, I would like to continue doing it⁶¹
(20 years old, female, Analco).

Especially for women, we were very motivated because we felt very useful... the men are used to going, so it is no big deal for them. In the case of women, it was like something was really motivating us to keep going. We did not want the job to end because apart from feeling useful, it was paid and so we could contribute to the household. We were the ones who were always there ready and on time. I mean, if they told us [to be ready] at 5:30, we were waiting for the bus at 5:20⁶² (28 years old, female, Analco).

⁶¹ Si me gustaria involucrarme mas porque es bonito, de hecho, hubo un tiempo donde estuvieron dando empleo temporal y yo iba cuando estaba de vacaciones. Y era de ir a cuidar los pinitos que nacen por sí solos, a limpiarles a alrededor para que pudieran seguir creciendo. Luego también a las podas y todo eso... y me gustaba ir entonces sí me gustaría seguirlo haciendo

⁶² En especial para las mujeres nos sentíamos muy motivadas por que nos sentimos útiles ¿no? O sea, nos sentíamos muy útiles en el campo. Los varones están acostumbrados a ir al monte por lo que hay muchos techos comunitarios, entonces para ellos como que no es tanto la gran novedad. En el caso de las mujeres sí fue como que algo que nos motivaba a seguir yendo. No queríamos que acabar el trabajo porque aparte de que nos sentíamos útiles, era remunerado y podríamos aportar a la casa. Entonces por esa parte, las mujeres éramos las que estamos ahí a la orden. O sea, si nos decían a las 5:30 a 5:20 estamos esperando el autobús.

In Analco, the communal authorities have, since 2014, organized several forest-related training workshops targeting youth, albeit with limited success. A workshop on *Directional Felling and Plague Control* was organised in the Summer of 2019, which two youth completed. Another training workshop focused on how to drive logging trucks, but only one male youth finished the course.



Plate 5.9 Youth during a workshop of Directional Felling in Analco.

External support has played a role in creating opportunities in Jalapa. Gerardo, for example, is from Jalapa and one of 300+ community forestry technicians who work under the National Forestry Commission (CONAFOR) program. Filemon Manzano Mendez, who oversees community forest management for CONAFOR, noted that these technicians are mostly young adults (under 40 years of age), and a goal of the program is to support young people who are committed to helping their communities. As the forest technician from Jalapa noted, *I would like to continue with this work, but at the same time [it's important] that other people take this job and so we are more people who get involved in this*⁶³.

⁶³ Me gustaria continuar con este trabajo, pero al mismo tiempo que otras personas tomen este trabajo y así somos mas gente los que nos involucramos en esto.

5.2.1.3 Inter-community Exchanges and other initiatives

In Jalapa, there has been a particular focus on knowledge exchanges – organizing visits to other communities in Oaxaca to learn about their forestry operations and experiences. Youth and schoolchildren are encouraged to attend. In July 2019, for example, a visit to Teococuilco de Marcos Pérez, a community in Oaxaca’s northern highlands, involved 18 schoolchildren. In 2018, some of the youth who were working on Jalapa’s forest inventory visited Analco to learn about how they do things there.



Plate 5.10 Youth during the exchange in Teococuilco de Marcos Pérez, Oaxaca.

Youth in Jalapa have had opportunities to learn about local forests through nascent initiatives, such as the community’s new Wildlife Committee. Jalapa’s forest technician told me that five female youth were volunteering on the committee, which helps track and monitor whitetail deer, owls, coatis, and lizards in the forest. In 2019 and 2020, a youth lead eco-tourism project began with the approval of community authorities and supported by a local NGO, INDAYU, and the University of Saskatchewan.

In Analco, there was also the aforementioned three-day workshop (2019) where middle schoolers (14-16 year olds) learnt about current forestry activities and were invited to share about what they found interesting.



Plate 5.11 Youth visiting the Forest during the Analco's Workshop on August, 2019.

5.2.2 More to be done

There have been youth engagement strategies in the two communities. However, while numerous, they have been ad hoc, sporadic, and limited in scope.

Youth in both Jalapa and Analco felt that their communities (and leadership) needed to do more to create meaningful opportunities and spaces where youth can engage in local development activities, including those related to forests. Whether this will happen is another matter. A 14 year old participant from Analco believed that *"there is a lack of will"* among older community members to do this. A 26 year-old female from Analco was concerned that so few in the younger age ranges (14 to 18 years old) were taking an active role in community activities and that they, in particular, should be targeted: [make them participate in] *tequios, assemblies, and let them have more responsibilities*, she said.

This same participant noted the role that parents could and should play; to educate their kids about the importance of contributing to their community. Some older community members that I spoke to concurred. A 38 year old from Analco said it was sad that few parents motivate their children to participate in traditional land-based activities because there is no money in it, or because the activities are seen as too hard. He felt that parents and teachers should stop telling

their children that opportunities only lie outside of the community and in large cities. He wanted to see more workshops and training for young people, in order to show them what's possible (locally) and to motivate them to get involved. He felt, however, that such engagement should start early, when kids are in preschool or primary school. This was because efforts to date had been aimed at elementary school level and up, and with limited success: *We must help the teachers to achieve a broader vision of what the community is. For the young people who have already left high school, we can do it, but it will take us longer due to disinterest, and for those who have already left and are studying... already [they] see their interests elsewhere*⁶⁴.

Tsaani Villasante from the School for the Common Good (EBC), Oaxaca, had similar ideas: *It is important to generate participation spaces for young people. Spaces where there is a dialogue between authorities, youth and children*⁶⁵. According to her, creating these spaces is a job that all communities have to do, and to achieve that, creating awareness among the community-at-large about what youth want is essential. For her, the opportunities (for youth) would then follow.

Currently, many spaces for dialogue are dominated by adult men, so removing that barrier is important: *To make young people see that they can have these spaces or can ask for them*⁶⁶.

Yolanda Lara, of Estudios Rurales y Asesoría Campesina, A.C., concurred: *I think that a good number of young people don't see staying [in the community] as an option, but there are some that have begun to visualize opportunities, and then they are trying to find new ways [to make those possible]... but I feel that a process of awareness is needed.*⁶⁷ She thinks that options do exist but that youth aren't always aware of what is possible.

A couple of youth, one from each community, spoke to me at some length about what they believed was needed moving forward, based on their own personal experiences. One was male, 26 years old, and from Jalapa. He believed that the community was moving in the right direction but still had work to do; not so much in terms of creating more "new" projects, but doing a better

⁶⁴ Tenemos que ayudar a los profesores que están en la comunidad para que se pueda lograr, para que se pueda tener una visión más amplia de lo que es la comunidad. Ya los jóvenes que ya salieron de secundaria, sí lo podemos hacer, pero nos va a llevar más tiempo, por el desinterés, y los jóvenes que ya salieron y están estudiando, ya ven sus intereses en otro lugar.

⁶⁵ Es importante generar espacios de participación para los jóvenes. Genera esos espacios de diálogo entre autoridades, jóvenes, niños

⁶⁶ Lo mas importante es hacerles ver a los jóvenes que ellos pueden tener esos espacios o pueden pedirlos.

⁶⁷ Yo creo que una buena parte no lo ve como opción, pero yo creo que sí hay un sector que empieza a visualizar algunas oportunidades, y pues están tratando de encontrar nuevas maneras, pero allí yo siento que hace falta un proceso tanto de sensibilización.

job of promoting and maintaining what was already in place. He felt that community members did not know enough about the role of forest work. At the same time, the communal authorities had not invested in the upkeep of guardhouses, trails, cabins, and roads. Without a knowledgeable population, or proper investment in forestry infrastructure, he felt the sector would struggle to be an attractive proposition to young people.

The other was female, 28 years old, and from Analco, and was a *cargo*-holder and involved in the community's Charcoal Enterprise Committee⁶⁸ at the time of the research. The charcoal enterprise initially employed six women and three men, but despite receiving support from CONAFOR to build ovens and provide training, the initiative had been hindered by production and staffing problems. The little money generated had gone to cover basic running costs, leaving workers waiting, at times, to be paid. Combined with the physically demanding work, several had quit and as of September 2019, the enterprise was closed.



Plate 5.12 One of the charcoal ovens in San Juan Evangelista Analco

⁶⁸ Called *Ka Niula Yanni*, which means “active women” in Zapotec, Analco’s charcoal enterprise began life in 2018. Oak is predominantly used to make the charcoal, which can reach a decent price. The process, however, is time and labour intensive – 14 days in total to produce good charcoal for sale.

She told me that the community needed to rethink how such enterprises should be structured and run: *The first thing I would do is focus on the staff and ask them what they are looking for; right? Find a way for them to stay... I do not know. Perhaps in this way, there may be a better performance*⁶⁹. Having workers stay in the job long-term was essential since knowledge about what type of wood to harvest or the right heat to set (and maintain) for the ovens was a prerequisite to producing high-quality charcoal that would fetch high prices and generate reasonable profits.

A need to reconsider how forestry activities are controlled and managed was a theme that others brought up. Yolanda Lara, from Estudios Rurales y Asesoría Campesina, A.C. was clear that:

*Community forest management has to evolve into new forms to allow other sectors of the community, who are being left out of forest use, to generate opportunities from the forest resource, but not necessarily with oversight or control by communal authorities. Yes, they may work together, but there needs to be some freedom from community institutions. I believe that new forms of forest administration are needed*⁷⁰.

She saw current institutional structures, where forest activities and enterprises are run by the communal authorities, as a major limiting factor to getting young people involved in a meaningful way that could better reflect their needs and aspirations. However, she also considered the traditional structure to be adaptable; that it could be rejigged to enable a different way of doing ‘community business.’ Rather than being run wholly under the auspices of the Common Property Commissioner (Comisariado de Bienes Comunales), there was no reason why enterprises could not be run by a small sub-set of community members (for example, youth) in agreement with the community as a whole. While the community-at-large would need to maintain some oversight, those administering the initiative would control day-to-day decision-making and operations. Yolanda referred to this as, *Decentralizing [the] administration of community projects, opening the door to community members [to] have that impulse to promote and create [and implement] these new economic initiatives*⁷¹.

⁶⁹ Lo primero que haría sería enfocarme en el personal, saber que es lo que busca ¿no? Buscar la manera de que se quede, y no se, a lo mejor solo así se tendría un mejor rendimiento

⁷⁰ Yo creo que el manejo forestal comunitario tiene que evolucionar hacia nuevas formas que permitan que otros sectores de las comunidades, que se están quedando fuera de los aprovechamientos puedan generar oportunidades a partir del recurso forestal, pero ya no necesariamente pasando por las instancias comunitarias. Sí, en acuerdo con ellas, pero no necesariamente administrado por las instancias comunitarias. Yo creo que se necesitan nuevas instancias de gestión internas.

⁷¹ Sí creo que tiene que haber una descentralización de la administración, para que entonces la gente más joven tenga ese impulso para fomentar y crear esas nuevas instancias económicas.

Fermin Sosa, a *comunero* of Analco and founder of the Oaxacan NGO, INDAYU A.C., also felt that communities needed a more “adaptive management” approach; to consider and explore new and different ways to use and benefit from their territorial resources, including forests. He said that youth in Analco and Jalapa, and the other places where he has worked, are looking for economically profitable opportunities that are attractive and sustainable. Michelle Sánchez, also of INDAYU A.C, added that this needs to be accompanied by a revaluation of land-based livelihoods – from farming to forestry – so that community members (young and old) can see their worth: *If we work on appreciating farmers and forestry workers, and if the children see that the job they do is highly valuable, then maybe the concept of a "better life" will change and youth will be interested in doing work in their community*⁷². Michelle believed that too many young people have been led to believe that the "best life" comes through being a “professional” living and working in a city, when, in reality, this is unrealistic for many.

There have been some efforts to encourage young people to take a more nuanced view of what the “good life” entails. The teacher and principal at Analco’s elementary school, explained that the school has focused on getting children to recognize the value and importance of the communal territory, why it needs managing, and to understand that the community is their inheritance and that of future generations. Personally, she was less worried about young people wanting to leave the community, and more concerned about the fact that so few were choosing to return. For this reason, it was important for the schools and the community-at-large to instill in young people the idea that “quality of life” is not merely synonymous with having money. As she told me, *What is the use of having a good economic level if you do not have the rest? Here the community offers us a beautiful ecosystem, biodiversity, water, and harmony*⁷³.

Filemon Manzano Mendez, who was instrumental in getting Analco’s community forestry venture up and running, has set his sights on two federal government programs designed to help integrate young people into the local labour market. ‘Young People Building the Future’ and ‘Young People Writing the Future’ support youth to become important economic actors in their communities. Filemon said that, as a part of this, it was important that communities remain

⁷² . Si trabajamos en la revalorización de ellos mismos y que sus hijos puedan ver que realmente lo que hacen es valioso, entonces a lo mejor el concepto de mejor vida para ellos cambiara y los jóvenes se interesaran en los trabajos de la comunidad.

⁷³ De que sirve tener un buen nivel economico si no se tiene lo demás. Aqui la comunidad nos ofrece un bonito ecosistema, biodiversidad, agua, en general una armonia

connected with those youngsters who leave to continue their studies – so that they still feel a part of things and are encouraged to return in the future; to show to them that they could still work as accountants or lawyers or in other professions but do so in support of local businesses and community enterprises. In terms of territorial-based initiatives, including forestry, getting trained as tourism specialists and guides, or as agronomists and biologists would offer up interesting work opportunities locally *If we manage the forests correctly*.

5.2.3 Barriers to Youth Participation in Community Forestry

Barriers still remain. A community member told me how Analco was in urgent need of its own logging team, and had made efforts to train up young people to take on this work. But few had been interested. While he acknowledged that the community does not offer the best salaries, the work still pays enough to live well. Because there was so little uptake locally, the community had to hire people from outside the community: *We kept insisting that young people or older people come to train and keep those jobs, but it did not happen*⁷⁴. He put this down to apathy and too few people valuing forest work. Yolanda Lara told me about a similar scenario in Capulalpam de Mendez, a community in the same region as Analco. At the same time, the issue could be as technological as mental or attitude-based; *Working 8 hours with an ax to get the minimum wage is not attractive to anyone. Working for 6 hours with a chainsaw for a much higher wage could be interesting for youth* (Francisco Chapela, personal communication 2021).

Daniel Klooster, a researcher and Professor of Environmental Studies at the University of Redlands, felt that out-migration posed a huge challenge to community forest management in places like Analco and Jalapa. Filemon Manzano Mendez, from Analco and a Director at CONAFOR, concurred; too many communities had too few young people living locally – limiting the pool of skilled and physically able labour required for most forest work. Klooster has observed that many youth want work that is relatively stable, with decent pay, and not overly hard (physically-speaking). This is not what most forest work offers, much of which is seasonal. Subsequently, it may only be attractive to youth wanting to get their *foot in the door* (in terms of earning a wage) and thus a way to remain in the community with their family.

⁷⁴ Insistimos todavía en que se acerquen nuestros jóvenes o señores para capacitarlos y ellos puedan realizar ese trabajo, pero eso no sucedió.

For Francisco Chapela, there is a problematic mismatch between the schooling that children and youth receive and the kind of outlook (on life) and knowledge that they need in order to view forestry and forest-related work as a noble pursuit. In particular, the promotion of a strong conservationist (no-touch) ethic can create barriers: *At schools, they are taught that cutting trees is bad and does not help the environment. Young people are afraid to cut trees, and I think it is a very artificial idea, very constructed, because it does not correspond at all to their reality*⁷⁵.

Yolanda Lara also spoke about this; noting how misinformation about the threats that formal forest management poses to local forests has gained traction among community memberships.

The above realities may help to explain the relatively low numbers of youth taking on forest work, leading to the kind of labour shortages that previous mentioned participants had complained about. And for people like Yolanda (who have dedicated their lives to supporting forest communities), the lack of uptake is of real concern: *These cases are telling us something, and we have to try to understand why. You do see youth in the 25 to 33 year-old bracket working on these projects but it's harder to come across those that are younger*⁷⁶. She returned to the subject of communities needing to pursue a period of internal reflection and consider how they do things.

5.3 Future Trajectories

Youth were asked how the forest should be managed in the coming years. Of the 34 participants, 17 participants from both communities said that they would be happy for their community to continue working in a similar vein. In the case of Analco, some older youth were able to reflect on the past six or seven years (since formal forest management began): *Well, I think that since they have been doing it, it is okay. Look, I have been watching since the first year, and right now, the trees are big*⁷⁷. Several youth did mention wanting to see more reforestation programs, so as to offset the trees felled through logging. Two youth were not sure about what direction future forest management should take, and it was notable that just one participant preferred the forest

⁷⁵ En las escuelas, a los jóvenes se les enseña que cortar arboles es mal y que eso no ayuda al medio ambiente. A los jovenes les da miedo cortar arboles, y creo que es una idea muy artificial, muy construida, porque no corresponde para nada a su realidad objetiva.

⁷⁶ Estos casos son un foco amarillo, y que hay que tratar de entender porque . A los jovenes de mas de 25 años a los 33 es mas facil verlos ven proyectos, pero mas jovenes es muy dificil.

⁷⁷ Pues considero que como lo están haciendo, está bien. Digo me ha tocado ver desde la primera anualidad, y ahorita los árboles ya están grandes. Se supone que el proyecto son 10 anualidades.

not to be touched at all. Similar findings emerged in Jalapa, although youth had more things to say. Of 14 participants, eight wanted to see the community continue with the forestry work. And a female participant 14 years old believed that more would support what was going on as people became more informed about the forest management plans. For some, the future was exciting:

As part of our work in the community, we visited San Juan Evangelista Analco, and I realized that they are quite advanced in managing the forest. So, I can see that in a few years, the community will look like this, more advanced, with better-quality wood. Moreover, that people get more involved in forestry work⁷⁸
(21 years old, male, Jalapa del Valle).

Two youth in saw forest management as important but wanted to see more emphasis on reforestation. Two participants said that they would like to see more forest projects and associated job opportunities come on line. Like Analco, just one youth in Jalapa disagreed with current forest management plans and wanted to see a reduction in permitted logging volumes:

I disagree with what is currently being done with the forest because it will take a long time to have the same trees. I think it would be better to do it in a lower volume because now the entrance to the forest looks terrible. I would not cut all the trees with pests, only the most plagued ones, and I would recommend reforestation in better suitable areas⁷⁹
(27 years old, male, Jalapa del Valle).

Youth were asked how they envisioned their community in 10 years time. In Analco, 11 of 19 participants, representing all age-groups, saw the community struggling given how many members had already left to live elsewhere. While some felt the situation could improve through return migration – a 23 year old female noted how “*there are two or three families that were not here when I left the community*” – most youth saw further population decline as inevitable⁸⁰, with one youth worried that Analco would look “*empty and unkept*” as more agricultural plots are abandoned and aging residents struggled to maintain things as they should. It is a scene that Daniel Klooster also feels is possible, having seen this pattern emerge in other rural communities in Oaxaca:

⁷⁸ Pues nosotros por parte de la comunidad visitamos San Juan Evangelista Analco y me di cuenta que ellos están bastante avanzados en el manejo del bosque. Entonces yo veo que la comunidad en unos años así, más avanzada con madera de mejor calidad. Y que la gente se involucra en el trabajo del cerro.

⁷⁹ No estoy de acuerdo con lo que se esta haciendo actualmente con el bosque va a tardar mucho tiempo para que tengamos los mismos árboles. Yo considero que sería mejor hacerlo en menor volumen, porque ahora ya la entrada se ve feo. Yo no cortaré todos los plagas, solo los mas plagados y para la reforestación la haría en áreas adecuadas.

⁸⁰ This perception of youth may not tally with current demographic realities for Oaxaca that are showing a persistence of rurality (Bada and Fox 2021) and a stabilising (rather than declining) rural population (Robson, Klooster & Hernández-Díaz 2019).

In the next ten years, I think that you will see communities that look much like they do now. They will have a lot of old people, and a very small population of young people. They just will not have enough population to maintain themselves. There will be middle-aged families who visit but do not live there [in the village]. Some communities might have a fair number of returned migrants. It is kind of scary in the United States. So it is possible to imagine some expulsions of migrants from the United States that would put men and women back into Mexico, of which some might go back to the countryside. I think it would change the ten years vision slightly, but it would just kind of increase the number of people a little bit but not hugely.

It should be noted that not all youth in Analco saw things in such bleak terms. Five of those interviewed were generally optimistic, anticipating a community with improved infrastructure, more businesses, and new community-level projects underway. A 29 years old male participant saw things getting *Better... I always see the community improving.*

The majority of youth in Jalapa (nine of 14 interviewees) predicted growth and, compared to their counterparts in Analco, were more optimistic about the future. They saw new community initiatives such as those tied to forestry as having a positive impact on Jalapa's social fabric and structure. As a 20 year old female expressed, *If forest management and alternative projects like ecotourism work, then I think it would be a better community for everyone. Better in its forest, better in terms of communal organization. Right now, the organization of the community is broken, going from agreement to disagreement, but if these projects go well, I think it will be a more united community*⁸¹. A 22 year old male concurred: *If the forest work continues, I think that people will have more work within the community and they will not see the need to go elsewhere.*⁸². Positive outlooks for Jalapa were also expressed by some of the expert practitioners that I interviewed. Fermin Sosa (INDAYU A.C), for example, saw forest management as being a good thing for Jalapa in the long run:

In 10 years, I see them with more appropriation of the process, perhaps with more learning experiences, with greater social and community appropriation, with a greater conviction of what is being done, with obviously greater benefits. I think it is important to be aware that the forest will not solve life [challenges in these places], but it can

⁸¹ Si funciona el manejo forestal y los proyectos alternos como el de ecoturismo entonces creo que sería una mejor comunidad para todos. Mejor en su bosque, mejor en la organización comunal porque es una prueba que tenemos. Ahorita la organización de la comunidad esta rota, por acuerdo y desacuerdos, pero si estos proyectos salen bien pues yo creo que va a ser una comunidad más unida.

⁸² Y si se sigue con los trabajos del bosque pienso que la gente va a tener mas trabajo dentro de la comunidad y no va a ver necesidad de que se vayan a otros lados.

*contribute to it. I do see it as progress and a consolidation of forest use and management*⁸³.

Others were hopeful but remained cautious, aware that the current context makes the future in places like Jalapa both challenging and complex. As Francisco Chapela (ERA A.C) explained, *I would not like to think that the dominant process is that of expropriation, and then in 10 years time we will have seen a tremendous advance in forest loss. I do not even want to think that, so I would like to imagine some future less hideous, less gloomy, and I think it can be*⁸⁴. And for some youth, predicted growth was the threat, as an expanding urban zone potentially encroaches into forested areas: *Obviously, it is going to grow, it is going to be bigger. I hope that in the mountains they put a limit so that houses are no longer built, that people do not cultivate and thus the forest is maintained and protected*⁸⁵ (19 year old, male).

5.4 Chapter Summary

Youth expressed an interest in potentially working in their communities, including in forestry, but were not clear about what that work would look like or whether it was realistic proposition given their stated aspirations. Youth in Jalapa saw greater promise in forestry than those in Analco. Youth held ideas for forest-related projects and initiatives, although these came mainly from older youth who had been exposed to forest work, forest-based *tequios* or had held cargos within the communal authorities. So, while community forestry is seen by its proponents as a source of work for young people, it is not clear that youth themselves are invested in the sector; while most value forests and forest activities, few saw forestry as an obvious livelihood opportunity or pathway.

This is a concern for community leaderships and those supporting the CF sector in Oaxaca. To date, certain efforts have been made in the two communities to get youth interested in forest-related activities. These are *tequios*, training workshops, community visits, and learning

⁸³ Lo veo, así como con más apropiación del proceso, quizás con más aprendizajes, con una mayor apropiación digamos social, comunitaria, con una mayor convicción de lo que se está haciendo, con mayores beneficios obviamente. Yo creo que hay que ser consciente en ese aspecto, el bosque no le vas a solucionar la vida a Analco, pero sí puede contribuir a. Sí lo veo como un avance y como que más consolidado esta cuestión del aprovechamiento forestal

⁸⁴ No quisiera pensar que el proceso dominante es el de desapropiación, y entonces de aquí a 10 años el pronóstico sería un avance muy grande en la desapropiación. No quiero ni pensar eso, quisiera imaginarme algún futuro menos feo, menos sombrío, y creo que sí puede ser.

⁸⁵ Obviamente, va a crecer, va a ser mas grande. Yo espero que en la montaña pongan un limite para que ya no se construyan casas, que no cultiven y asi se mantenga y se protega el bosque.

exchanges. However, youth felt that community leaderships needed to do more to create more meaningful opportunities. And several barriers may limit the possibilities for greater youth engagement in the sector; including the small number of youth in communities because of out-migration, and formal education that promotes forest conservation over forest production.

CHAPTER SIX

Discussion

This study was designed in response to the following research question, *How can Mexican communities engage and involve their youth to strengthen forest use and management?* The work was operationalized via three objectives, namely: *Explore the perspectives (and values) of youth in relation to community, community institutions, and forest resources; Document and explore the current and potential roles of youth in forest work and associated governance; and, Identify practical strategies to integrate youth into forest use and management structures.* Chapters 4 and 5 presented key findings in relation to these objectives.

In this discussion chapter, I build on those findings and reflect further on my central research question. My thoughts are organized into two main sections. The first focuses on three key issues or realities that, I argue, frame the likelihood of and possibilities for effective youth engagement. These are trends in youth mobility and migration, the differentiated nature of rural-urban linkages (why geography matters), and cultural barriers and institutional change. I look at each of these in turn, to argue that the nature of such realities will shape (and determine) how youth might be engaged (and empowered) to take on meaningful roles within the community forestry sector. The second and final section then provides a snapshot of current possibilities for community forestry in the Oaxacan context, explains the importance of making work opportunities ‘meaningful’ to youth, and the role of the state in delivering an enabling set of programs and policies. I end with a brief summary.

6.1 Trends in Youth Mobility and Migration

Data made clear that migration and mobility, as both idea and reality, characterize the lives of youth from both study communities. There are youth who will leave their communities. Many may leave permanently or make only sporadic visits back. Others will leave but with plans to return. These findings resonate with work carried out elsewhere that shows migration, and particularly internal (within country) migration, to have become increasingly common among rural youth (Valentine et al., 2016; Boucher, Stark & Taylor, 2005).

In both study communities, youth migration appeared to be driven by a combination of education and work aspirations, and the perception that job opportunities that reward higher education remain scarce in their communities and regions of origin; again, something that has been reported for other contexts (Luschei, 2012; Santibañez, Vernez, & Razquin, 2005), where rural youth want to be educated and many aspire to “professional” careers rather than land-based work. This can mean moving away from home, especially when options for higher education are often fewer in number in rural regions compared to urban centres (Gisberger, 2017). Known as “education migration” (Santibañez, Vernez, & Razquin, 2005), the act of moving away for school was most evident in Analco, where there is access to secondary school but not high school or beyond.

It was clear from interview data that parents can have an important influence over youth decisions regarding education and work, and thus youth migration patterns and dynamics. In Analco, several parents were explicit in wanting their children to pursue further education rather than find work locally. This has been reported in other rural regions. For example, in rural Thailand, Knodel and Saengtienchai (2007) observed how parents saw migration as a necessity (for their children) because of a lack of opportunities locally, along with a negative perception of agricultural work. Similarly, in Mexico, Valentine et al. (2016) showed how boys from nine coffee-growing communities were encouraged by their parents to continue their studies so that they could escape the hardships of life in the fields.

Further education has become the logical next step for many youth, and as more young people choose such a path, local culture begins to emphasize the value of schooling for life success, with subsequent youth choices reflecting that (Bednaríkova, Bavorova, & Ponkina, 2016; Blackwell & McLaughlin, 1999). And as work elsewhere suggests, increasing one’s access to education can enhance the probabilities for future migration – young people who are more educated and with higher potential earnings are more likely to migrate in the future (Martinez, Santibañez & Serván-Mori, 2013; Corbett, 2007; Kodrzycki, 2001). From the many young people I spoke to, it felt like further education was becoming (or had become) the norm, and I think this constitutes a real change from a generation ago when far fewer community members were educated beyond secondary level.

Whether it's for education purposes or for work (wage-labour), migration and mobility appear part of many young peoples' futures in the two study communities, and this holds true for both males and females. In this way, the act of "leaving the home community" becomes a "natural process" (Stockdale, 2006, p. 360).

The rise in education migration in rural Oaxaca may also mark an important shift in migration dynamics for the region. Up until the 2000s, wage labour migration from rural Oaxaca was dominant (Cohen, 2010). Since then, migration flows have fallen dramatically (Warren, 2020; Passel & Cohn, 2019; Saenz, 2015; Villareal, 2014; Passel, Cohn & Gonzalez-Barrera, 2012), with the net flow of migrants from Mexico to the United States falling to zero in the 2010s (Passel, Cohn & Gonzalez-Barrera, 2012; Villareal, 2014). What this suggests is that while out-migration remains a key social phenomenon in rural areas, it is not at the heights it was two decades ago (Bada & Fox, 2021) and is now driven as much by education and career aspirations as immediate financial need. It also favours internal (within country) over international movements (Robson, 2019). This last point is important, because internal migration produces a particular set of dynamics with their own set of implications for migrant-community connections. For one, the greater emphasis on internal movements means that migrants are potentially closer (physically) to their home region and community. Also, while wage labour migration was often male dominated (Nobles & McKelvey, 2015; Cohen, Rodriguez, & Fox, 2008; Boehm, 2008; Broughton, 2008; Hirsch, 2003), data from this study suggest that education migration sees as many female as male youth leave their home community.

So, what might these trends mean for the prospects of youth taking on active roles in community life and commons management, including community forestry? This is an important question, since we know that migration reduces the number of residents available to assume public offices and contribute labour to community projects (Robson, 2019; Robson, Klooster & Hernández-Díaz, 2018), reduce the flow of ideas into community assemblies and collective decision-making (Martinez Luna, 2015), and thus potentially weaken the institutions and organizational structures around which these regimes are based (Klooster & Robson, 2021). I contend that it's a mix of good and bad news. On the one hand, youth out-migration is a reality that communities must face up to. This is not something that they can easily stop, since it mirrors or reflects youth-held aspirations regarding work or study, and a belief held by some that the home community offers

limited life opportunities. On the other hand, it would be wrong to envision an emptying out of communities as youth make and enact upon their life choices. And this offers hope, which I expand upon below.

First, a significant number of young people who have left, or plan to leave, are interested in returning to their community at a later juncture. And in the case of Jalapa del Valle, several interviewees saw real opportunities to pursue professional careers while still living in the home community. In this way, communities could benefit from migration; to see young people leave and then later return with new skills and ideas. As Waddell and Fontela (2015) found, returnees (in this case, from the United States) can have positive effects on local economies, improving income, education, healthcare, electoral participation, and overall well-being. Similar positive outcomes can be seen through the return of young, well-educated professionals (Boucher, Stark, & Taylor, 2005). Second, while data from the research show migration to be a part of youth-held plans, there were youth in both communities who had no desire to leave their home community. These are individuals who value their attachment to community and territory, as well as the security and quality of life that these provide.

These findings – that migration for some youth could be temporary (based on a desire to return), while others do not plan to leave – suggest that communities will benefit if they are able to create conditions and opportunities that young people are looking for. In 2018, The European Network for Rural Development (ENRD), in collaboration with youth, hosted the workshop “Making rural areas more attractive for young people”. Six key areas/factors were identified: 1) Improving rural image (marketing/success stories), 2) Knowledge exchange between generations, 3) Active, young, and innovative people (youth trained to better understand the local context and operate in it), 4) A welcoming culture, 5) Better connectivity with public transportation, and 6) Interlinking rural and urban areas. While this was focused on a rural context (in Europe) quite different to that (rural Oaxaca) studied for this research, several factors resonate with what youth told me, as well as findings from previous youth engagement work in the two study communities (Robson, Sosa Pérez & Sánchez Luja 2019; Robson et al. 2019).

6.1.1 The differentiated nature of rural-urban linkages

One of the reasons for choosing Analco and Jalapa as study communities was their respective locations in relation to Oaxaca City. I wanted to consider if and how proximity to such a major urban centre might change how youth think, what their aspirations and life plans are, and the range of possibilities open to communities in terms of how youth might be engaged and empowered as community actors, including in the area of forest use and management.

For example, proximity to an urban centre has been shown to facilitate access to higher education, better job opportunities and services (Valentine et al., 2016; Tacoli, McGranahan & Satterthwaite, 2015; Von Braun, 2007; Tacoli, 2003), and, at the same time, improve life quality and encourage more people to remain living in their home community. This seemed to be reflected in my study, where youth in Jalapa were studying at high-school or university while holding down paid work. This was much less of an option for young people in Analco, which at two hours' drive from Oaxaca City is a community more representative of the “deep Mexico” (Bonfil Batalla, 1987) associated with campesino (peasant) communities. The contrast between Analco and Jalapa, in this regard, may highlight the differentiated nature and relevance of rural-urban linkages (Lin et al., 2019). As Berdegué, Proctor and Cazzuffi (2014) describe, rural-urban linkages can enable some communities and community members to generate income from both local and non-local activities; to maintain a living space in the “home” village but travel to local and even distant urban centres for shopping, work and specialized services. Such rural-urban linkages become a part of daily lived realities and are a driving force behind rural societies' changing nature (Tacoli, McGranahan & Satterthwaite, 2015; Tacoli, 2003).

For many, if not most, youth in Jalapa, Oaxaca City felt part of the fabric of daily life – evident not only in frequent visits, but also in the things that they called for in their community (such as better roads and transportation infrastructure, which they understand will consolidate the rural-urban connections they benefit from). These findings reflected lessons from earlier work in the community by Robson, Sosa Pérez and Sánchez Lujá (2019). With the city so close, youth in Jalapa have their feet planted in both rural and urban worlds, making use of the latter to meet education and work aspirations as well as for leisure and recreation purposes. These are connections not as clearly afforded to youth in Analco. Across different parts of Latin America, rural-urban interactions can bring new social, economic and cultural opportunities to people

living in rural areas (including youth), but such opportunities are not universal or uniform across contexts (Tacoli, McGranahan & Satterthwaite, 2015; Hernández Asensio & Trivelli, 2014).

The research suggests that strong rural-urban linkages do not necessarily translate into youth being disconnected from their home community. Many of those interviewed expressed a desire to remain in or return to their community. For some youth in Jalapa, spending time in the city had helped them to appreciate their community better; for what it provides in terms of access to nature, better air quality and less noise pollution, and because it feels a safer place to be. Work on youth-forest connections in other contexts found similar dynamics. For example, Asselin and Drainville (2020) showed that young Anishnaabeg leave their community in Quebec, Canada, to pursue post-secondary education, work, access housing, healthcare and other services, or to seek adventure. However, they are also tempted back to the community, where they receive support from family and friends and appreciate having access to the forest. Zetina, Balas McNab and Castillo's (2019) worked with youth in the community of Uaxactun, Guatemala, and found an even split in terms of the number who want to stay and the number who anticipate moving away. Rather than being pushed towards urbanism (Cortright, 2020), youth from such places may come to experience and enjoy both worlds. This is what Asselin and Drainville (2020) showed in their study, where youth mobility exhibited a circular pattern whereby work, culture, family and education are interrelated; and where youth movements to and from the city become *“part of a dynamic of continuity with, or extension of, community life”* (Lévesque, 2002, p.24).

Speculating further, one reason why youth in Jalapa may show greater interest in staying and getting involved in local governance, is because they know that they can live locally while still benefitting from access to the city. Youth in Analco spoke appreciatively of their community and the quality of life there, and, for many, the attraction of living in a large city is tempered by attendant issues of crime and pollution. Yet, while they knew that they would be safe in the home community, many struggled to see how their aspirations could be met if they stayed put.

6.1.2 Rural-urban linkages and local economies

Some scholars argue that increased rural-urban linkages deliver adverse social, economic and environmental impacts for resource-dependent rural communities (Kapfudzaruwa et al., 2018; Charlery de la Masselière et al., 2020; Christiawan, Wesnawa & Sarmita, 2020; Berdegué,

Proctor & Cazzuffi, 2014; Hernández Asensio and Trivelli, 2014). Yet emergent rural-urban linkages are a reality and highlight the complexities of contemporary rural livelihoods, which have come to revolve around mobility, migration and the diversification of income sources and occupations (Van der Ploeg, 2018; Akkoyunlu, 2015). Kratzer and Kister (2020), for example, argued that traditional agriculture is no longer viable for many rural people. That may be true, but it is also evident that payment for environmental services schemes, rural tourism, migrant remittances, and sustainable food production (aimed at urban consumers) (Bicudo da Silva et al. 2017) can create important new sources of livelihood and income. If we take rural Oaxaca as an example, forestry, biodiversity conservation, and ecotourism have certainly become more prominent, such that land-based activities continue but perhaps with an emphasis on non-extractive and non-agricultural uses, backed by the explicit protection of forest land with high conservation value (Robson & Klooster, 2018).

In other words, rural economies are changing and they are often diversifying. And, in doing so, community futures may become contingent on how they integrate into rural-urban rather than wholly rural systems (Akkoyunlu, 2015; Tacoli, 2006). How communities do this will necessarily be impacted by their geographies and the nature of these emergent rural-urban linkages and realities. Analco, for example, has looked to diversify its economy through ecotourism, forestry enterprises such as charcoal production, and securing Forest Stewardship Council (FSC) certification – as a way to add value to timber harvested from responsibly managed, socially beneficial, environmentally conscious, and economically viable forests.

In the context of this research, the question that obviously arises is whether local youth see promise (meaningful opportunities) for themselves in such developments. Some of the older youth I spoke to noted how Analco has struggled for economic success from its forestry initiatives, citing their location and distance from key markets as one disadvantage. While economic diversification (through forest-based activities) is a reality in Analco, in Jalapa they are on the cusp of similar plans. And here, youth were generally excited about the possibilities. This might be down to the novelty factor, but I think there is little doubt that youth there also saw proximity to Oaxaca City as a real competitive advantage over other communities in the state (especially with regards to tourism).

6.2 Cultural Barriers and Institutional Change

6.2.1 Institutional Change (will youth engage in the commons under current arrangements?)

In the context of rural Oaxaca, Aquino-Moreschi & Contreras-Pastrana (2016) and Robson, Klooster, & Hernández-Díaz (2019) have all stressed the key role that youth can and should play in community life and governance. Yet the possibilities for youth to take on a more active role in their communities and become agents of change, are shaped by the institutions that define life and governance in these places. Schusler et al. (2009) have argued that researchers should not only explore what motivates communities – their leaderships and organizations – to involve youth in local institutions and initiatives, but also how youth themselves might want (or not) to get involved, how they view the social institutions around which life is structured, and how they may be able to affect environmental and social change through their involvement in these structures and arrangements.

The theory of institutional choice described by Ostrom (1990) shows how people are most likely to invest in commons institutions when they are motivated by perceptions of increasing scarcity (of local resources) or have a clear vision of the potential benefits (both individual and collective) that their participation can bring about. In Oaxacan communities, commons institutions range from rules defining who can access and benefit from forests and other territorial resources to the social and cultural arrangements that essentially define what it means to a member of a community, and the attendant rights and responsibilities that come with that membership.

In both study communities, communal authorities have been explicit in their interest to integrate youth into forestry management (see section 5.1.3., Chapter 5), since they envision important benefits and opportunities if they can get youth involved. Ostrom (1990,1992) developed her theoretical framework around the idea of commoners as (economically) rational actors who will invest in rules and rule changes based on their own cost-benefit analyses. Klooster (2000) argued for expanding this view to incorporate a more cultural model (where institutions are more than just rules-in-use), thus enabling a broader and more nuanced view of why people are motivated (or not) to be part of the commons. Both these perspectives are relevant when considering how youth view the commons regimes of their communities and their role in them.

Interview data made clear that youth can feel underrepresented within their community (see section 4.2.3, Chapter 4), and that a disconnect can exist between their aspirations, needs and wishes, and what the community might expect of them. In this sense, current institutional structures may be creating a cultural barrier to youth engagement and empowerment. The youth who participated in this research understood the value of the *usos y costumbres* governance system – where social cohesion in the commons comes from community members participating and working together in the Assembly, the *cargo*, and the *tequio* – but at the same time saw those same service obligations as placing too great a burden given one’s own work and family commitments. Some youth spoke about changes that they felt were needed (Chapter 4, section 4.2.3), and how they might participate more actively if they were catered to more explicitly. Ideas included having a youth representative within the Assembly, being given a prominent role in village *tequios*, and the importance of parents supporting their voice during the assemblies.

Giving space to youth to participate in such ways may contribute to organizational sustainability and effectiveness, as well as democratic, social and economic development (Zeldin et al., 2000; Rajani 2001). But it is crucial that youth are not simply engaged but also empowered to decide (for themselves) how they would like to participate and shape their role in village and territorial governance. This requires communities taking the time to listen to and understand youth-held aspirations, opinions and ideas, before taking the step of creating opportunities for youth to get involved, feel invested in their communities, and take the lead (Zurba & Trimble, 2014). This is especially the case for younger youth (under the age of 18), as well as those going onto further studies (who, in doing so, are delaying their entry into the *usos y costumbres* system).

6.2.2 Institutional flexibility

But can a long-standing, customary governance system like *usos y costumbres* adapt to better serves the realities, needs, and ideas of young people and, if so, how likely is that to happen and over what kind of timeframe? Berkes, Folke and Colding (1998) talked about three main aspects of institutional failure, with one being the (in)ability of centralized controls to adapt to changing social and environmental conditions. Robson (2009), writing in the context of rural Oaxaca, suggested that communities would need “*to balance and reinvent local traditions*” moving forward but might struggle to do so. More recent work has shown that select communities have

altered aspects of their governance structures to better reflect increasingly diverse memberships and member needs (Robson, 2019).

In Analco and Jalapa, youth remain an underrepresented constituency in their own communities – rarely catered to (in any explicit way) in the Assembly or the *cargo* system or village tequios. That is something that would need to change if youth are to be viewed as important actors (in their own right) within the community sphere. Currently, there are cultural and institutional barriers, often age-based, that may stop this from happening. But as González-Hidalgo & Zografos (2019) note, facing and overcoming resistance to change are essential components of creating new political communities, and, by extension, institutions that are better adapted to changing conditions and realities (Oakerson, 1992).

In finding a meaningful role for their youth, communities may need to reimagine their institutional arrangements, in much the same way that changes have been made by Oaxacan communities to account for and incorporate non-resident (migrant) members (Klooster & Robson, 2021). Adapting institutions to be more inclusive of youth might need to reflect the different pathways that youth are taking; from those living/staying in the home village to those living elsewhere, to those who may come and go, and to those recently returned after a prolonged period of time away. The kind of multi-tiered, multi-rights arrangements that migrants (from rural Oaxacan communities) have argued for (Robson et al., 2018; Sosa Pérez & Robson, 2019) might offer a guide; rules that enable youth to contribute to and remain a part of their communities, whether they are resident or not. While Oaxacan rural commons are built on the efforts of the collective, institutional flexibility will be needed to reflect memberships that are diverse in both location and outlook (Pierre, 2012).

6.2.3 Change takes time

None of this is likely to happen overnight. Roland's (2004) suggestion that institutions consist of fast-moving (political) and slow-moving (cultural) institutions is apt here. By being underpinned by long-held values and norms, cultural institutions can take a long time to shift. But there is evidence in rural Oaxaca that the cultural landscape is changing, albeit slowly. Youth talked to me about older community members beginning to speak on their behalf. Recent community leaderships have championed youth engagement, putting it on their agenda. And changes in

participation affecting other community demographics – namely women being given high-level governance positions and getting involved in forest management tasks – offer examples of how institutional structures and arrangements are no longer (wholly) dominated by older, adult males. This suggests that places like Analco and Jalapa are now in a better position to consider and possibly achieve meaningful youth integration.

6.2.4 Change in community-based enterprise structures

Lastly, institutional barriers to youth participation extend to how community projects and enterprises are organized and structured. In the forestry arena, Chapela (2018) reports that, since their inception in the mid-1980s, community forest enterprises have faced numerous obstacles and challenges, which, in the Oaxacan context, have included: administrative and managerial deficiencies; weakening of government institutions; and operational problems (Anta Fonseca & Meza, 2018). This was picked up on in my study, where youth were critical of the way that community-based enterprises were administered and managed, and spoke of the urgent need for reform.

In particular, the running of enterprises through the *cargo* system means that those looking after the operations may not have the necessary knowledge and skills, or if they do a good job, their role is only temporary. I observed how young people who fulfilled specific positions such as forest technician or forest manager receive training in those roles yet had to leave when their *cargo* ended, despite being skilled and often motivated to continue. For the community forestry enterprise, this means a loss in human capital, limited return on investment, and a loss of talent (ILO, 2020). Youth also felt the current system was not conducive to long-term planning and follow-up, with frequent changes in administration bringing with it a constant stream of new ideas and new priorities. In both communities, youth saw promise in the ‘gerente’ model, where professional, full-time administrators are hired to provide qualified direction and stability. Several communities in Mexico have opted for this model, albeit with mixed success (Bray, 2020; personal communication, Anta Fonseca).

6.3 Youth Engagement in Community Forestry

Community forestry, and associated initiatives and enterprises, may offer important venues for engaging and empowering youth, and building their capacity as community actors. Examples are emerging in Mexico, such as the ejido of Dziuche in Quintana Roo, where training models have been developed to promote youth inclusion in territorial and forest management activities as well as decision-making (Suarez, 2017). At the same time, youth migration and mobility, along with urbanism, remain a central part of the “new rurality” (Kay, 2008) emergent in places like Mexico (Burkham, 2012), and are a reminder that the potential of community forestry to deliver rural development it is not guaranteed (Merino, 2016). Indeed, some commentators (see Barraza et al. 2004) suggest that apathy and disinterest among youth with regards to land-based activities will ultimately undermine community efforts to build local, forest-based economies.

I feel the future need not be so grim, with my research pointing to two main trends. On the one hand, analysis of youth-held attitudes and perspectives suggest it would be wrong to assume that young people hold no or limited interest in local forests and associated livelihood opportunities. Data made clear that while a majority of youth contemplate living outside of home village and territory, many remain connected to their community and local forests – evidence that their culture and identity remains rooted in these places (Robson et al., 2019). Likewise, participants in both places expressed an interest in forest-based work, supporting the findings from youth-focused research conducted elsewhere in the Americas (Robson, Sosa Pérez & Sánchez Luja, 2019; Asselin & Drainville, 2020; Quaedvlieg et al., 2019; Zetina, Balas McNab & Castillo, 2019). On the other hand, despite that connection to forests and expressed interest in forest-based livelihoods, youth have not been heavily involved to date, are not very knowledgeable about forest use, management and work (see Barraza & Pineda 2003 for similar findings for elsewhere in Mexico), and exhibit only limited commitment to community forestry as a sector and pursuit.

And limited youth involvement and integration is not confined to forest use and management but affects community-level projects and debates in general. Young people talked about limited opportunities to share their ideas (with others in the community), as well as raise doubts and concerns, and that opportunities were particularly limited for youth under 25 and for female youth of all ages. While older youth (those in their mid- to late-twenties) are better positioned to

feel a part of community-making processes, whether through the cargos they serve or because they are more likely to be listened to during assemblies, other youth have few such outlets and can feel disenfranchised (Aquino-Moreschi & Contreras-Pastrana, 2016; Robson et al. 2019).

According to Barnett and Brennan (2006), there is an important and interdependent relationship between community development and youth development; the idea being is that by bringing youth on board, communities benefit from the ideas, energy, and problem-solving and decision-making skills that they contribute. So, if youth engagement and empowerment is something that communities should pursue, how do they best proceed? Well, in general terms, Menegat (2002) argued for youth integration through: citizen participation; (building) comprehensive knowledge of the local environment; environmental education, and public programming. Thus, if we consider the question of youth engagement in community forestry, there are several areas that communities might focus on.

One obvious place to start is the lack of awareness among youth about local forests and how they are used and managed by their communities and why. As Chapter 4 (section 4.3.1) made clear, youth aren't regular visitors to their local forest, rarely participate in community meetings and activities, and the environmental education they receive at school is often not well adapted to local contexts and realities. The youth who do know about contemporary forest management plans and activities were generally those in the older age bracket (22-29 years old), who know more because of having been exposed through participation in community institutions and initiatives. As several participants noted, communities might benefit from engagement efforts that target children at a relatively young age (Lane et al. 2005), when they are still in primary and middle school, and before they develop and act upon work and life aspirations. This point had been noted by Robson, Sosa Pérez & Sánchez Luja (2019) in previous work in Oaxaca, and by others working with youth in forest communities in other parts of the Americas (Asselin & Drainville, 2020; Quaedvlieg et al., 2019; Zetina, Balas McNab & Castillo, 2019).

Increasing awareness among children and youth in their early teens is thus an important precursor to more explicit engagement efforts (Sutton & Kemp, 2002; Frank, 2006). Schools can play a key role. As Barraza et al. (2004) note, communities in forest regions in Mexico, such as Oaxaca and Michoacán, rarely include forest management as a school subject or thematic area,

despite the actual or potential importance of forestry to local and regional economies. Without this focus, youth may develop other ideas about how local forests should be administered. As Chapela (2018) noted, promotion of a conservationist discourse has proven a barrier to community forestry in the national context. In Analco and Jalapa, adult community members told me that local schools and media are teaching young people that forest management is not compatible with conservation – while reforestation programs are given prominence, logging gets associated with forest deterioration. The issue of school curricula not being well attuned to community needs and realities has been widely reported (Suarez, 2017; Martinez Luna, 2015; Dietz, 2010; Maldonado Alvarado et al., 2010), and has begun to see pushback in a rural Oaxaca context. In September 2020, Oaxaca saw the inauguration of its, indeed Mexico’s, first Communal University, mandated to educate and train professionals with a community focus rather than western colonial vision (Manzo, 2020) – in other words, students are taught about things that support and validate their lived reality and context.

Another issue that may affect (the possibilities for) youth engagement is the gap between what youth envision in terms of relevant land- and forest-based work and activities, and what community authorities and expert outsiders (academics, external forest technicians, NGOs, governmental authorities) want to see happen and are actively looking to promote (Crespo & Biemiller, 2018; Bray, Merino & Barry, 2007; Mitchell, 2006; Chapela, 2005). While some community forestry scholars and practitioners paint a picture of vibrant communities managing their forests to generate work opportunities and provide wide-ranging social and economic benefits (Pazos-Almada & Bray, 2018; Crespo & Biemiller, 2018), such a scenario did not resonate strongly among the youth who participated in my research. Analco offers a prime example. Despite having won national prizes for forest management and forest conservation in recent years, the community has not seen “success” translate into forest jobs and youth retainment.

6.3.1 Making forest work meaningful for young people

My work, along with that of others (Zurba & Timble, 2014; Schusler et al., 2009; Cahill, 2007; O’Donoghue, Kishner, & McLaughlin, 2002), suggests that youth might be willing, keen even, to take on a more integral role in community life, including forest management. But youth want to have some say or “agency” over what that involvement looks like. In the forestry sector,

communities cannot expect youth to become key actors if those same youth remain on the periphery of decision-making processes or are presented with work options that do not match what they aspire to. Communities need to understand what those expectations and aspirations are before spending time and money training young people up and inserting them into the labour force. They have rarely been asked what they think, and as a result do not feel empowered to speak out or be proactive.

It is through engagement that community leaders can come to understand the kind of work and livelihoods that youth might be likely to respond to. Yeoman (2014) has classified “meaningful work” as a fundamental human need, that provides for prosperity, value of freedom and social recognition, and engagement in the process. Creating real opportunities in the community forestry sector requires touching on these points. It also needs to be inclusive, and account for both gender and mobility (MacQueen & Campbell, 2020). Youth need to be told by their communities about the significant jobs that could emerge, such as those in primary or secondary processing of timber products or in related service roles. For example, Bray and Merino (2004) observed the lack of specialized personnel in sawmills as a key sector deficiency, and one that youth may respond to if they know about that need. Similarly, MacQueen and Campbell (2020) reported on emergent opportunities in community forestry around marketing and I.T. and other support services.

Beyond greater engagement and knowledge-building among youth, mechanisms are needed that empower youth to become change-makers in the sector. While youth engagement in the natural resource sector has been promoted, a lack of youth incorporation or integration into planning and decision-making persists (Frank 2006), with Knowles-Yáñez (2005) observing how the legalistic, reactionary, complex, and economic-focused nature of such processes can discourage youth from participating or is used to justify their (non)involvement (see also Wynveen and McMahan 2019). Communities can underestimate their youth, and my hope is that Analco and Jalapa do not make that mistake, since there is a small but important number of youth in both communities who want to know about their territories and get involved in associated initiatives and activities, including those tied to local forests. These youth understand the value of territory and the importance of the products and services that forests provide (Vaske & Kobrin, 2001), but

without efforts to meaningfully integrate them into village and territorial life, many will invariably turn their attention to alternate pathways as they reach their mid- to late-teens.

Communities need to do what they can to not only keep hold of those who remain but also attract those who have left. Robson, Klooster and Hernández-Díaz (2019) have written about the pressures facing Oaxacan communities that have lost residents through out-migration. Klooster and Robson (2021) have shown that these pressures may become more pointed as new land uses (e.g. forestry, ecotourism) create a need for additional committees and more collective labour. Fewer residents also means less people attending community assemblies, so fewer insights and opinions to help members draft good policies and rules, and too few candidates to choose from when electing members to perform cargos (Hernández-Díaz & Robson, 2019).

6.3.2 Government-sponsored policy and program support

Communities need not be alone in this work. In Mexico, the state has been a prime actor in framing institutional choice in the commons (Bray, 2013; 2020) and this extends to community forestry. Federal governments have been generally supportive of the sector over the past two to three decades (Bray, 2016), with the National Forestry Commission (CONAFOR) allocating more than US\$63 million for Sustainable Forest Development in 2020; although the overall trend has been towards a decrease in funding in recent years (Madrid Ramírez & Hernández, 2021).

While government support for community forestry has rarely incorporated an explicit focus on youth, this may be changing. In 2019, the *Jóvenes Construyendo el Futuro* (Youth building the future) program was launched. In addition to supporting young people to complete their studies, the program introduces young people to different types of work, with support from both private and public sectors (Government of Mexico, 2020). CONAFOR created its own stream under this program, through which it funds forest companies and enterprises to train young people (18-29 years of age) in skills that will enhance their job prospects in the forestry sector (CONAFOR, 2020). This is a promising development, although not without its problems. In Analco, for example, youth were encouraged to enroll in the program. But despite some interest, the time commitments were rarely compatible with individuals' *cargo* and family responsibilities and so most declined.

CHAPTER SEVEN

Conclusions

This study sought to explore how Mexican forest communities can engage and involve their youth to strengthen forest use and management. The research was qualitative in its design and approach, following a case study strategy of inquiry and influenced by community-engaged research principles. Data were collected through participant observation, semi-structured interviews, group interviews, focus groups, a workshop, and field visit observations. In this final chapter, I summarise the main lesson learned. First, I lay out the key findings related to each of the three stated research objectives. Next, I consider the main scholarly and applied contributions of the work. I end with some final remarks and reflections, including ideas for future research (in a COVID-19 and post-COVID-19 context).

7.1 Key Lessons by Research Objective

7.1.1 Objective 1

Explore the perspectives (and values) of youth in relation to community, community institutions, and forest resources

Most youth have aspirations to leave their home communities for higher education and/or work purposes. They are generally supported in this aim by their parents and, by extension, other community members, who see limited livelihood opportunities locally for young people. In this way, youth migration and mobility has become a key social phenomenon in the two communities, and appears closely tied to or dependent on youth-held aspirations. However, significant numbers of youth (in both communities) either plan to stay or return to live in their home village over the long-term. This points to the strength of youth-community connections and provides community leaderships with opportunities to build upon. Some important differences between the two communities were evident; notably, how proximity to Oaxaca City and strong rural-urban linkages gave youth in Jalapa greater opportunities to meet work and life aspirations from a home town base.

Connection to, perspectives on, and involvement with community institutions were found to play a key role in how youth engage with their community, and shape the possibilities for youth to

take on more active roles, including in community forestry. It is through involvement in cargos, *tequios* and *assemblies* that youth currently learn about community membership responsibilities and community-level initiatives. However, youth involvement in these institutions is generally limited to older and often male youth. This leaves large numbers of youth less integrated and who subsequently feel less invested in community decision-making. Youth wanted to see greater opportunities and a more receptive environment to voice their thoughts and opinions. This held especially true for female and younger youth.

Youth-held connections to forests were strong in terms of how they value and perceive forests and the goods and services they provide, but less so in terms of practical, day to day knowledge of local forests and forest management. Knowledge about forestry was most evident among older youth (over 23 years of age), which reflected their greater integration in institutional structures such as *cargos*, *assemblies* and *tequios* and, in a few cases, because they had studied land- and forest-oriented subjects in high school.

7.1.2 Objective 2

Document and explore the current and potential roles of youth in forest work and associated governance.

Youth are currently exposed to the community forestry sector and associated forest work via participating in training workshops, *tequios*, and learning exchanges. However, the numbers involved to date are small, have been sporadic in their organization, and actual forest work activities weighted towards youth in their twenties. Again, this reflects how youth often become involved, and subsequently engaged, in community-level activities (that include forestry) through their communal service obligations. Such entry points are generally restricted to those over the age of 18 who have remained living in the home village and thus required to participate in customary governance structures. Interest in forest work and associated decision-making was less evident among youth yet to enter their “apprenticeship” as community members.

In both communities, when young people *are* involved in community-level projects, such as forest management, their interest and motivation (in such activities) appears to increase. At the same time, youth participation in forest work can peter out once their responsibilities (as *cargo*-holders) end. This suggests that current forms of integration via customary institutions may

struggle to support long-term youth engagement; risking a loss of energy, ideas and knowledge available to the community-at-large.

The research suggests several areas of forest work that offer potential opportunities to youth. These range from ecotourism to the potential marketing, management, and IT arms of a flourishing community forestry enterprise. However, many youth were either unaware of this potential (of the sector) or dubious about whether meaningful and long-term work could become a reality. In terms of differences between the two communities, youth appeared more excited about forest management in Jalapa than in Analco. This may be because forestry in Jalapa is novel and has made youth curious. But it is also connected to proximity to Oaxaca City, which local youth see as providing a competitive advantage in the marketplace – both in terms of timber production as well as non-timber forest activities such as ecotourism.

7.1.3 Objective 3

Identify practical strategies to integrate youth into forest use and management structures

Communal authorities have, over recent years, made efforts to integrate young people into different forestry activities, through the use of training workshops, *tequios*, and learning exchanges. But these have been sporadic in nature. Youth purport a level of interest in forestry, but their limited participation in such activities suggest the opposite. The tasks and options that young people have been presented with to date may be mismatched with their own personal aspirations, and would support the view that a different type of engagement is needed, which would require the communal authorities to co-design their youth integration strategy with the youth themselves. Forest management can encapsulate a wide range of different types of work, but youth lack knowledge about these opportunities and have had little to no chance to voice their own opinions and wishes in formal settings. The research also pointed to the appropriate education of children and younger youth (under the age of 14) as being fundamental. Education that better matches the reality and context of growing up in a resource-dependent rural community and gives greater meaning and value to land-based activities such as forestry. It is important that they be exposed to these realities, and the value of rural life, at an early age, and before they develop career and livelihood aspirations.

7.2 Contributions of the thesis

Youth are an indicator of societal directions and transformations (Feixa-Pàmpol & Urteaga, 2019). In rural Oaxaca, they are an indicator of rural community trajectories, which includes the important question of forest use, management, and conservation.

This thesis makes three key contributions. First, we cannot begin to think about youth-forest connections and possibilities without looking at the place and role of youth in broader community and societal spaces (Robson et al. 2019, Martinez Luna, 2015). The present research has made clear that the possibilities for youth to take on a more active role in their communities, including community forestry, are shaped by their plans around migration and mobility (Hecht et al. 2015), the rural-urban linkages that characterise where their community is located (Tacoli 2003, Berdegué, Proctor & Cazzuffi 2014), and the institutions that define life in these places (Aquino-Moreschi & Contreras-Pastrana, 2016, Robson et al., 2019). On this last point, the relationship between youth and community institutions, and the compatibility between (emergent or evolving) youth culture and long-standing customary practices is critical, and a reminder that central to understanding people's place in the commons is the question of culture (McCay & Acheson, 1987). Berkes et al. (1989), Feeny et al. (1990), and Brondizio, Ostrom, and Young (2009) have all shown how common institutions function best when community members feel invested in associated processes and outcomes and are incentivized to put in the requisite time and energy that collective action demands (Poteete, Janssen & Ostrom, 2010). As Armitage, de Loë, and Plummer (2012) argued, good environmental governance practice should adhere to appropriate fit and scale, with institutions matching local systems and realities.

Second, in wanting youth to be more engaged with and integrated into community life, broader community memberships must consider how relevant traditional governance structures are, and what may need to change or be adapted (Folke et al. 2005). Youth cannot be expected to become key actors if those same youth remain on the periphery of decision-making processes and do not buy into current institutional arrangements. Gruber (2008) pointed out that empowerment, equity and adaptive leadership are all principles that help to increase the probability of successful community-based natural resource management (CBNRM), including forms of community forestry.

Third, the work is not only of value to academic scholarship, but provides useful insights (and checks on reality) to communal authorities and the communities they serve. These insights build on interdependencies between community development and youth development to help identify intentional and meaningful youth engagement and empowerment strategies (Barnett & Brennan 2006; Menegat, 2002). In both study communities, authorities have been explicit in their interest to engage youth in community forestry, which they see as key to securing a bright future. What my work makes clear is that communities cannot expect positive results without first engaging youth to understand how their lived realities, aspirations, and ideas can fit within (an adapted) communal context. Barnett and Brennan (2006) have written about why youth must be empowered to drive such processes, and how this requires youth to be given the platform and space to voice their ideas and concerns, and to take a lead in designing local policy initiatives. Whatever unfolds in Analco and Jalapa, and similar communities in Oaxaca, these need to be youth-led (and not only community-driven) endeavours. This increases the likelihood of crafting mechanisms and pathways that youth respond positively to, and allows communities to benefit from the knowledge, energy, creativity, diverse points of view, and cultural resources that youth can provide.

Instead of spending time and money on initiatives to insert youth into specific labour forces that they may not want to be a part of, communities must respond and adapt in full consideration of youth-held aspirations and ideas and youth mobility, and within a context of building a sustainable future amid the ‘new rurality’ (see Kay, 2008) now established in places like Oaxaca.

7.3 Future research directions for a COVID-19 and post-COVID-19 world

The COVID-19 pandemic has impacted life, globally, and done so in a myriad of ways. The pandemic has created great uncertainty and increased (real and perceived) senses of vulnerability. Forest communities in Mexico are no exception, with Rodriguez Mega (2020) reporting how some forest enterprises have had to cut their employees' pay (by as much as 75%), Francisco Chapela warning that, *within two or three years, there may be a powerful setback in the care of the forests and rainforests of Mexico*, and leading Mexican scholar, Leticia Merino, voicing concern about the (in)ability of public and not-for-profit sectors to properly support communities in need (both cited in Rodriguez Mega, 2020).

Yet life goes on. And in the context of this thesis research, might effective youth engagement and empowerment be one way for affected communities to build resilience (Berkes & Ross, 2013) and internal capacity to ride out tough times with some degree of hope and positivity? Potentially, yes. However, to do so will require communities to be proactive and that, in turn, throws up some important research-related questions and opportunities.

One concern stated youth aspirations, and specifically those tied to formal education, which at the moment increases the likelihood of young people leaving their communities (Martinez, Santibañez & Serván-Mori, 2013; Corbett, 2007; Kodrzycki, 2001). Yet, instead of seeing “education migration” (Santibañez et al., 2005) as a threat – as something that drives the loss of young people – the knowledge and skills gained through formal study and training (see Lane et al. 2005) could benefit communities greatly if their members are encouraged from a young age to see life “at home” as something to aspire to long-term. Research into what constitutes “appropriate” or “community-relevant” school education in the context of rural Oaxaca is important, including how that might be developed and tied to the higher education plans of young people who aspire to achieve particular career and work goals.

Another area concerns how youth might create community forestry pathways that can be sustained long-term. In Chapter 6.2, I described how young people who fulfilled a *cargo* related to forest management gained important skills and motivation but that their interest in such activities could wane or stall once their *cargo* responsibilities ended. An important area of research concerns the challenge of maintaining involvement over time. This challenge mirrors the aims of the recent “Jóvenes Construyendo el Futuro” (Youth building the future) program launched by the federal government (CONAFOR, 2020). Examples of small and medium-sized social enterprises, developed by young people, and based on their community's natural and/or cultural resources, are also beginning to emerge (Zetina, Balas McNab & Castillo, 2019, Robson, personal communication 2021, Campos Rivera, personal communication 2021). These offer exciting pilot projects to be studied and learnt from. Do they excite and motivate youth and, if so, how and why? If not, why not? Do they offer flexible enterprise models that communities can consider, and to what degree do they align with the “gerente” model that Bray (2020) recently described? How they are performing, how are young men and women integrated (see Frank,

2006), and to what degree might they be influencing broader resource practice and management at the community level? These are all interesting questions to explore.

Even if such changes were actioned or made possible, can we expect to see significant numbers of youth respond to bolster their community's active membership? As Chapter 4 made clear, making the home community "attractive" to youth as a place to settle long-term and raise a family, will likely require several changes besides more community-oriented schooling and greater integration into land-based activities such as forestry. Of the six different factors that the ENRD (2018) identified, youth from Analco and Jalapa del Valle mentioned at least five of them, and these included both better connectivity (transportation and media) and enhanced rural-urban linkages. As such, one cannot expect youth to become active players and, potentially, change-makers in their communities in isolation of these other issues being addressed. This suggests that ongoing research into youth-community-forest linkages must adopt a holistic, bigger picture perspective; where reversing the trend of young people leaving for the city goes beyond the question of meaningful work to also deal with issues of digital connectivity, rural housing, health and transport infrastructure.

Lastly, the current situation with COVID-19 is providing moments of reflection to help us think about and reimagine the way that we live, the way that we organize socially, and how we coexist with the natural environment. The immediate impact of COVID-19 has been different in the two communities – tied in large part to geography. In Analco, the community decided to cut itself off from the outside world in terms of movement of people in and out of the home territory. In Jalapa del Valle, its proximity to dependence upon Oaxaca City made such a move much harder to contemplate. But one change it will have brought about in both places is that more youth will have remained put or returned. We know that across global regions, large numbers of people have returned to rural areas because of prolonged lockdowns and worsening economic situations in cities (Harvey, 2021); a trend that may not alter anytime soon. This raises an important research question: will the fact that there are potentially more youth living in these communities, and under these (pandemic-related) circumstances, translate into greater levels of youth attachment (and commitment) to place, and lead more youth to shift aspirations and plans to stay "at home"?

Time will tell but, as researchers, we need to be ready to investigate such possibilities if we are to track and predict change over time and better understand the future scenarios in store for both communities and their forests.

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Appendix A. Interview scripts / focus group Questions

Individual interviews with youth (14-29)

These interviews are intended to ask youth for their perspectives and opinions related to lifestyle, life and work ambitions/aspirations, connections with the forest, experience working on the land, knowledge of community governance structures. I want to know what youth know and think about how the community makes decisions, what role they have (or could have) in this and community projects in general, what are some barriers to their involvement, and ideas for the future (especially regarding forest resources).

These interviews will be adapted in accordance to participants' age and gender. A 14-year old, for example, will likely have a different understanding of community to a 27-year old who has spent several years providing communal service (doing cargos, doing forest tequios, attending assemblies). As such, some questions listed below may gain greater prominence when interviewing some youth than others.

Draft script:

1. Were you born in the community?
 - If not, where were you born
 - When (and why) did you move here?
2. What do you like to do in your free time? (interests, hobbies)
 - Are there things that you would like to do that you find difficult to do here?
3. Are you in school or at university?
 - Do you plan to continue studying?
 - What do you want to study? Why?
4. Do you plan to stay here?
 - If not, where will you go? Why?
 - Do you think that you'll return? Why? Why not?
5. What kind of work interests you?
 - What would you like to be when you're 30 years old?
 - Why that in particular?
6. Can you do that here in the community or in this region?
 - [if answer is NO], does that bother you?
7. Would you be interested in working here in the community?
 - If so, what would you like to do? If not, why not?
8. Does your family farm?

- Do you help them in the fields?
 - Do you enjoy that work? What do you like about it? What don't you like about it?
9. How often do you take a walk in the forest?
 - [If never or rarely] Why not?
 - Would you like to do that more often?
 - [If they go often] How do you feel when you are in the forest?
 10. Is the forest important to you? Why or why not?
 11. What is your favorite thing about the forest?
 12. What do you know about the work that the community does in the forest?
 13. Are you involved in that at all?
 - Would you like to be? If so, how?
 - What might stop you from getting involved?
 14. How do you think the community should use its forest in the future? (conservation, forestry etc.)
 15. Have you ever been to a community assembly?
 - What happens there?
 - Are you interested in those discussions? Why? Why not?
 16. As a young person, do you feel represented in the assembly?
 - How could that situation be improved?
 17. What changes would you like to see in your community?

Individual interviews with adult community members (30 years and older)

Note: will be representative of gender, age, elders etc.

These interviews are intended to ask adult community members for their views and opinions on youth-community connections, youth ambitions/aspirations, what they want for their children, generational differences in attitude and perspectives, and the role of youth in community institutions and projects.

1. How long have you lived in the community? What's your principal occupation?
2. Have you spent time living outside of the community?
 - Where?
 - What did you do?

3. What do you think life is like for youth living in this community?
4. Do youth have a role in community decision-making? In community projects?
 - Can you give some examples?
5. Do you think that needs to change?
 - How?
 - If not, why not?
6. Are youth interested in work or activities in the forest?
 - Why do you think that is?
7. Do young people think along similar lines to older people in the community?
 - If there are differences, what would you say they are?
8. Are you concerned about youth leaving the community?
 - Why?
 - What can be done about that?

Individual interviews with key informants working in the community's forest sector

Guided by themes such as role of youth in forest use / work, opportunities/need for greater youth involvement in these areas, barriers to that happening, workable ideas.

1. How would you describe the current status of forestry in the community?
2. What are the biggest issues facing this sector in the community?
3. How can these be responded to?
4. Do you see opportunities for youth in the community?
5. How involved are youth currently?
 - Could that be increased?
 - Are there barriers to that happening? What are they?
6. Can forestry and forest work offer opportunities to youth in the community?
7. Are youth are interested in forest work? Why? Why not?
8. Are there examples of youth taking part in community forestry activities?
9. Where do you see the community in ten years' time?

Group interviews with community leaderships

At least two group interviews, one with the Comisariado (communal authority) and another with the municipalidad (municipal authority), guided by themes such as: the level of current youth involvement; the role/opportunities that they see for youth in their governance and development activities; possible barriers to increasing youth involvement; some workable ideas or strategies.

Comisariado:

1. How involved are youth (ages 14-29) in the activities that you administer?
 - Can you give some examples?
 - Are some age ranges more involved than others?
 - Are there initiatives in place to get more youth involved?
2. What do youth know about the community's forestry activities and management plan?
3. Do youth participate in forestry activities?
 - In what way?
4. Are the voices and opinions of youth considered when decisions are made?
5. Do youth participate in comunero assemblies?
 - All youth (across the age range)?
 - Could and should more youth be involved?
 - Why? Why not? How could this be achieved?
6. Do you think that younger comuneros share similar values and perspectives to those of older comuneros?
 - How would you characterize these differences?
7. Do you think the community-at-large is ready for youth to have a more active role?
8. Where do you see the future in terms of forest use and management?

Municipalidad: Adapted from questions listed above.

NOTE: Interviews will be conducted with the present incumbents of these governance bodies. I will also look to interview the immediate past incumbents of these authorities also.

Focus group (youth)

Several youth focus groups may be organized (of different age ranges and genders), focused on where they see themselves as community members and what changes they would like to see)

FG of 14-17 year olds (one all-male, one all-female):

1. Do you see opportunities for yourselves here?
2. Do you feel represented in community decision-making?
3. What changes would you like to see?
4. What kinds of meaningful work exist or could exist in the community?

Focus groups (adult women, adult men)

Key questions that will guide small group discussions about youth-community connections, what parents want for their kids, implications for the community:

1. Should your daughters/sons live and work in the community?
2. Are there opportunities for youth here?
3. Where does this leave the community?
4. Are changes needed?

Community workshop

Workshop with youth, communal authorities, and other select community members to hear and respond to the presentation of findings to date, and to discuss and co-design practical strategies to engage and enable youth participation in community and territorial (forest) governance.

Appendix B. Example consent form (interviews with community members)



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Participant Consent Form: Individual Interviews

(Community members)

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

You are invited to participate in a research study entitled: **Building inclusivity in Mexican forest commons**

Researcher(s): Sylvia Constanza Mora Sánchez, Graduate Student, School of Environment and Sustainability, University of Saskatchewan, +1 306 370 6877, constanza.mora@usask.ca

Supervisor: Dr. James Robson, School of Environment and Sustainability, University of Saskatchewan, +1 306 966 1017, james.robson@usask.ca

Purpose(s) and Objective(s) of the Research: My name is [name of researcher] and I am inviting you to participate in a research project to better understand the current and potential role of youth in forest-related activities in your community. The research is guided by the following objectives:

1. to explore the perspectives (and values) of youth in relation to community institutions, collective projects, and forest resources;
2. to document and explore the current and potential roles of youth in territorial governance;
3. to identify practical strategies to integrate young people into forest use and management structures.

Research knowledge will be mobilized through a community workshop. The research will inform the policies and practices of your community, with outcomes – enhanced engagement mechanisms for youth – expected to strengthen ties between people and forests for long-term sustainability.

Procedures: At this time we are interviewing people in the community about their views, ideas, and concerns related to the above-stated themes. This interview would be conducted in person. It will take place in a location and at a time chosen by you, the interviewee. Interviews should take approximately 45-60 minutes to complete. Interviews will be audio recorded and transcribed, if you so permit.

Please feel free to ask any questions at any time regarding the procedures and goals of the study or your role in this interview.

Funded by: Social Sciences and Humanities Research Council (SSHRC), Government of Canada

Potential Risks: There are no known or anticipated risks posed to you by participating in this research.

Potential Benefits: By participating in this research, you will be providing information that could help your community to enhance the role of youth in local institutions and forest-related projects, and thus make local policies and practices (especially around forest use and management) more inclusive of community memberships. Enhanced engagement mechanisms and institutions can strengthen ties between people and forests for long-term sustainability.

Compensation: You will not be compensated financially for this interview.

Confidentiality: If you so choose, we will guarantee your anonymity and confidentiality. Consent forms and identifying information will be accessible only to members of the research team and will be stored separately from interview data so participants will not be identified based solely on their response. Although your information may be used in diverse written documents and presented orally at community events and conferences, it will only be used when combined with others' data, so we will keep your identity confidential if you choose. If there is a need to report direct quotations, you have the option of choosing a pseudonym (see below) and for any identifying information to be removed.

There are several options for you to consider if you decide to take part in this interview. You can choose all, some or none of them. Please put a check mark on the corresponding line(s):"

I grant permission to be audio taped: Yes: ___ No: ___

I wish to remain anonymous: Yes: ___ No: ___

I wish to remain anonymous, but you may refer to me by a pseudonym: Yes: ___ No: ___

The pseudonym I choose for myself is: _____

You may quote me and use my name: Yes: ___ No: ___

Storage of Data: Hard copies of workshop and interview data will remain under the strict supervision of the researcher: under lock in their office. Electronic data will be stored in encrypted form in a password-secured computer. Data will only be accessible to the researcher and supervisor named at the beginning of this consent form. Your contact information will be kept in an encrypted file in the primary researcher's password-secured personal computer and destroyed upon completion of the study. All data gleaned from this interview will be destroyed 5 years after the interview was conducted

Right to Withdraw: Your participation is voluntary and you can answer only those questions that you are comfortable with. You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort. Whether you choose to participate or not will have no effect on your position [e.g. employment, class standing, access to services] or how you will be treated. Should you wish to withdraw after the interview is completed, you can contact me or my supervisor by phone or by email. Upon withdrawal, all electronic and physical data and records associated with this interview will be destroyed. Your right to withdraw from the study will apply until September 30th 2019. After this date, it is possible that some form of research dissemination will have already occurred and it may not be possible to withdraw your data.

Follow up: We expect written reports of research findings to be available by late 2020. At that time, you can request a copy of the full student thesis and/or a plain language summary version by contacting either one of the researchers named at the front of this consent form. We will hold a community workshop to discuss initial study findings in the Fall of 2019 that you will be able to attend.

Questions or Concerns: If you have any questions or concerns, please contact the researcher and/or supervisor using the information provided at the top of the first page of this consent form.

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee

through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent:

Option 1 - SIGNED CONSENT

Your signature below indicates that you have read and understand the description provided; I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

_____	_____	_____
<i>Name of Participant</i>	<i>Signature</i>	<i>Date</i>
_____	_____	
<i>Researcher's Signature</i>	<i>Date</i>	

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Option 2 - ORAL CONSENT

Oral Consent: By signing and dating below, I [insert name of researcher] confirm that "I read and explained this Consent Form to the participant before receiving the participant's consent, and the participant had knowledge of its contents and appeared to understand it."

Oral consent was audio recorded [YES / NO] [circle as applicable]

_____	_____	_____
<i>Name of Participant</i>	<i>Researcher's Signature</i>	<i>Date</i>

Appendix C. Statement of intent for Jalapa del Valle



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Oaxaca, Oax. A 18 de Febrero del 2019
Asunto: Presentación de proyecto de investigación

Comisariado Ejidal de Jalapa del Valle.

Planta Baja de la Agencia Mpal. Jalapa del Valle, Mpio de San Felipe Tejalapam. Oaxaca.
PRESENTE

Estimados Señores:

La presente es con el objeto de solicitar su colaboración para el llevar a cabo el proyecto denominado **“La participación de los jóvenes en la silvicultura comunitaria: lecciones de Oaxaca, México”**.

Se trata de un proyecto de investigación cuyo objetivo es responder a la pregunta:

¿Cómo pueden las comunidades forestales de México involucrarse e involucrar a sus jóvenes para fortalecer el uso y la gobernanza de los bosques?

La intención es llevar a cabo este estudio en dos comunidades de Oaxaca: el Ejido Jalapa del Valle y la comunidad de San Juan E. Analco. La investigación es coordinada por el Dr. James Robson de la Universidad de Saskatchewan de Canadá, en el marco de la Cátedra para la **“Diversidad Biocultural, la Sostenibilidad, la Reconciliación y la Renovación”**, una iniciativa para fortalecer los derechos de los pueblos nativoamericanos.

En Oaxaca, Estudios Rurales y Asesoría Campesina, A.C., a través de la Ing. Yolanda Lara Padilla participará como enlace en la coordinación de las actividades de campo colaborando con la investigadora Sylvia Constanza Mora Sánchez, que actualmente realiza sus estudios para obtener el grado de Maestría en Medio Ambiente y Sustentabilidad con el Dr. Robson.

En este marco, acudimos a ustedes para conocer su disponibilidad a participar en el estudio el cual estamos previendo terminar en aproximadamente 2 años a partir de esta fecha. Para llevar a cabo las actividades de esta investigación, la Bióloga Sylvia Constanza Mora Sánchez desarrollará actividades como entrevistas, talleres con jóvenes y encuestas. Cabe señalar que en el 2017, el Dr. Robson llevó a cabo talleres similares a los cuales se les pretende dar seguimiento con ayuda de este estudio.

De antemano, gracias por su atención a la presente.

James Robson, PhD
Universidad de Saskatchewan, CA.

Ing. Fernando Ruiz Noriega
Estudios Rurales y Asesoría Campesina, A.C.
CISE-1-0001-8
PTE. DEL COMISARIADO EJIDAL
Jalapa del Valle, Tejalapam,
Eta, Oax



Recibi Notificación
19/02/2019

Appendix D. Statement of intent for San Juan Evangelista Analco



UNIVERSITY OF SASKATCHEWAN
School of Environment
and Sustainability
USASK.CA/SENS



Oaxaca, Oax. A 20 de Febrero del 2019
Asunto: Presentación de proyecto de investigación

Comisariado de Bienes Comunales de San Juan E. Analco
Planta Baja de la Agencia Mpal. San Juan Evangelista Analco. Oaxaca.
PRESENTE

Estimados integrantes del CBC:

La presente es con el objeto de solicitar su colaboración para el llevar a cabo el proyecto denominado **“La participación de los jóvenes en la silvicultura comunitaria: lecciones de Oaxaca, México”**.

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En este marco, acudimos a ustedes para conocer su disponibilidad a participar en el estudio el cual estamos previendo terminar en aproximadamente 2 años a partir de esta fecha. Para llevar a cabo las actividades de esta investigación, la Bióloga Constanza Mora desarrollará actividades como entrevistas, talleres con jóvenes y encuestas.

Por último, cabe señalar que este estudio busca dar seguimiento a los talleres sobre el mismo tema que en el 2017, llevó a cabo el Dr. Robson.

De antemano, le damos las gracias por su atención a la presente.

James Robson, PhD
Universidad de Saskatchewan, C/



Roobi Origina

Secretario del Comisariado