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MARKET-DRIVEN DEVELOPMENT IN FRONTIER ECOLOGIES: POLICY,

INSTITUTIONS AND POLITICS IN WESTERN INDIA

by

Dolly Daftary

A dissertation presented to the
Graduate School of Arts and Sciences
of Washington University in
partial fulfillment of the
requirements for the degree
of Doctor of Philosophy

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Abstract

This dissertation investigates the interaction of market-based development policy with democratic decentralization in ecological frontiers in western India inhabited by the vast majority of the country's poor. The study explores how the leaders of elected local bodies called panchayats who are driven by the imperatives of broad-based distribution deliver upwardly distributive capital-intensive development in resource-poor communities during a period of state-neoliberalization. On the basis of eighteen months of ethnographic fieldwork in eastern Gujarat, the study explores how the implication of panchayats- the world's largest system of democratic politics- in large-scale politics shapes the distribution of material resources in resource-dependent communities. In the context of the state's devolution of governance to non-state actors, the project investigates the role of political society actors including panchayat leaders, vote-brokers and political competitors in shaping the distribution and governance of market-led development and its impact on well-being. In doing so, the dissertation uses a mixed-method design combining a range of qualitative and quantitative techniques including archival research, household surveys, in-depth interviews, political ethnography, multi-site participant observation, and national, state and district-level data.

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Table of Contents

| | |
|---|-----|
| Abstract..... | ii |
| Acknowledgments..... | iii |
| List of Tables..... | v |
| List of Figures..... | vii |
| 1. Market-Driven Development in the Drylands: Policy, Institutions, Politics | 1 |
| 2. Ethnographic Setting, Field Site and Methods..... | 23 |
| 3. Parties, Panchayats and the Political Economy of Development | 67 |
| 4. Democratic Decentralization, Electoral Politics and Distribution in the Community .. | 91 |
| 5. Neoliberal Governmentality and the Locus of Micro-Credit at the Margins..... | 135 |
| 6. The Politics of Markets and of Value in High-Value Commodity Production..... | 177 |
| 7. Conclusion: The Mangle of Market-Driven Development and Democratic Politics .. | 214 |
| Appendix A: Household Questionnaire..... | 225 |
| Appendix B: Lineage Leaders' Interview Schedule..... | 231 |
| Appendix C: Micro-Credit Group Leaders' Interview Schedule..... | 232 |
| Appendix D: Micro-Credit Group Members' Interview Schedule | 233 |
| Appendix E: Archival Documents | 234 |
| Appendix F: Buffalo-loan Repayment at Two Percent Interest Compounded Monthly .. | 239 |
| References..... | 241 |

List of Tables

| | |
|--|-----|
| Table 1 Annual Rainfall in Dahod in Millimeters, 2004-2009 | 34 |
| Table 2 Distribution of Economic Resources According to Caste | 95 |
| Table 3 Distribution of Households According to Lineage | 100 |
| Table 4 Educational Attainment among Men Aged 20-55 According to Lineage | 101 |
| Table 5 Ownership of Perennial Wells According to Lineage | 108 |
| Table 6 Average Motors Rights According to Lineage | 108 |

| | |
|---|-----|
| Table 7 Average per Capita Livestock According to Lineage | 109 |
| Table 8 Rate of Self-help Group Formation from 2003 to 2007 | 122 |
| Table 9 Tersing's Distribution of Watershed Development in Monetary Terms | 128 |
| Table 10 Distribution of Wage-Labor Beneficiaries According to Lineage | 130 |
| Table 11 Distribution of Wage-Labor Days According to Lineage, 2003-2007 | 131 |
| Table 12 Distribution of Average Wage-Earnings According to Lineage | 131 |
| Table 13 Distribution of Voters According to Lineage | 132 |
| Table 14 Distribution of Watershed Development by Livestock Quintiles | 133 |
| Table 15 Watershed Development's Distribution According to Well-Type Categories | 134 |
| Table 16 Self-Help Groups' Composition in Terms of Lineages | 143 |
| Table 17 Self-Help Group Members' Age According to Lineage | 145 |
| Table 18 Extent of Self-help Group Membership According to Lineage | 146 |
| Table 19 Village-Wide Leadership Roles of Self-Help Group Leaders | 150 |
| Table 20 Group Leaders' Assets Compared to the Average for their Lineage | 150 |
| Table 21 Self-Help Group Members' Average Literacy According to Lineage | 153 |
| Table 22 Loan-Taking by Saraswati Self-Help Group Members, 2004-2005 | 166 |
| Table 23 Loan-taking by Gayatri Self-Help Group Members, 2004-2006 | 171 |
| Table 24 Milk Sale in Mahipura in 2006-2007 | 182 |
| Table 25 Owners and Non-owners of Milk-Livestock in the Largest Lineages | 190 |
| Table 26 Distribution of Surplus Foodgrain Producers According to Lineage | 190 |
| Table 27 Distribution of Calves According to Lineage | 191 |
| Table 28 Distribution of Cash-Vegetable Producers According to Lineage | 192 |
| Table 29 Characteristics of Milk-Selling Households | 194 |
| Table 30 Ownership of Milk-Bovines According to Well-Categories | 195 |
| Table 31 Distribution of Per-Liter Price to Milk-Sellers | 196 |
| Table 32 Distribution of Milk Sale Duration in Months | 200 |
| Table 33 Distribution of Annual Earnings from Milk Sale | 204 |

List of Figures

| | |
|---|----|
| <i>Figure 1</i> Location of Gujarat in India | 24 |
| <i>Figure 2</i> Location of Dahod in Gujarat | 33 |
| <i>Figure 3</i> Location of Limkheda Block in Dahod | 49 |

1. Market-Driven Development in the Drylands: Policy, Institutions, Politics

How do market-based development and democratic decentralization interact to shape well-being in resource-poor communities? How do elected local leaders implementing capital-intensive development in labor-rich societies do so, given their imperatives of broad-based distribution and the indivisible nature of new material resources delivered to communities through market-led development policy? How are new markets in institutional credit and high-value commodity production organized in natural resource-dependent communities? This dissertation lies at the nexus of these questions and explores market-driven development implemented by elected local bodies called panchayats in semi-arid eastern Gujarat, western India, inhabited disproportionately by households in poverty.

This dissertation is a study of ‘Hariyali’ (Greenery), the Indian state’s largest watershed development program implemented by panchayats enacted by the Indian state through the Panchayati Raj Institutions Act in 1994. This study is situated in the geopolitical context of the state’s devolution of development to non-state actors since the 2000s, contemporary development policy paradigm’s emphasis on linking the poor with markets to improve their well-being, and the expansion of the financial sector’s role in development policy implementation. I inquire into the relationship between market-based development policy and democratic politics in India’s drylands inhabited by the vast majority of its poor; the impact of panchayats- the world’s largest apparatus of democratic politics on the distribution of market-driven development technologies; and the way in which market-driven development’s specific activities- micro-credit and high-

value commodity production are organized in remote communities through modes of self-governance involving actors in political society- that sphere which arises from civil society and comprises all actors, organizations, parties and movements concerned with capturing state power (Cohen & Arato, 1992) including elected representatives, informal leaders, development agents, political competitors and vote brokers.

Watershed development extends commercial inputs for high-value commodity production, deepens institutional credit and expands irrigation in semi-arid regions in India (see Li, 1999; and Nevins & Peluso, 2008 for Southeast Asian cases). Situated within the larger capital-intensification of small-scale agriculture worldwide since the 1990s, the largest watershed development intervention in India implemented in small-scale communities has shifted from ecological regeneration to irrigation intensification for cash-crop production in the 2000s, raising questions about the impact of this strategy on ecological security, food security for food-insecure households and inequality in the drylands.

The Panchayati Raj Institutions Act devolves power and resources for community development and local governance to elected local bodies called panchayats. Watershed development's implementation was shifted from NGOs to panchayats in 2003, putting the intervention squarely in the domain of electoral politics. Regional parties in India gained significant power with respect to national parties in the 1980s (Jaffrelot, 1998; Rudolph & Rudolph, 2002), and the enactment of Panchayati Raj (Elected Local Bodies' Rule) represents national parties' attempt to reassert control over democratic politics by channeling development directly to panchayat leaders.

This study investigates the way in which democratic politics shapes the distribution of market-based development's indivisible technologies in resource-poor communities, and how development interventions in semi-arid areas inhabited by the vast majority of India's poor voters are shaped by political competition between parties and panchayats' implication in higher scales of electoral politics. In the context of the rise of liberal democracy worldwide and deepening theoretical concern with the impact of democracy on distributional justice, the dissertation explores how development policy implementation by elected leaders shapes household well-being, and the extent to which market-driven development comprising credit delivery and high-value commodity production is a strategy of poverty-alleviation in resource-dependent communities.

Watershed development exemplifies the state's devolution of governance to non-state actors including contractual employees, NGOs and panchayat leaders called sarpanches and ward members elected from each electoral ward in a panchayat. Watershed development's centerpiece is the delivery of commercial micro-credit to households to purchase inputs for commodity production. This dissertation examines how the distribution of power in state institutions of democratic decentralization and market-driven development policy, in market institutions, social institutions and political institutions shape different development subjects' ability to control and exploit the economic mobility offered by capital.

The dissertation investigates how neoliberal development and democratic politics unfold in geographic contexts by means of a study in Gujarat, the poster-state of market-based reforms in India, where the central state's neoliberalization is bolstered by the pro-market orientation of the regional state to materialize what may be the most capital-

intensive form of watershed development in India. Gujarat has one of the highest economic growth rates in India and is ruled by the Hindu nationalist BJP, one of India's and the world's largest political parties. Known as the laboratory of Hindu nationalism, Gujarat epitomizes a dream tale of the success of BJP's political ideology of anti-minority nationalism, on the basis of which the party has ruled in the state continuously since 1995. Despite overall success in the state, Hindu nationalism has had limited success among subaltern voters in Gujarat comprising lower castes and tribes due to its tacit acceptance of caste-based discrimination, and due to deepening inequality in Gujarat under the BJP's rule. Gujarat's semi-arid districts inhabited by lower-castes and tribes are unstable sites of support for the BJP.

I investigate how watershed development is shaped by India's largest national parties, the Congress and BJP's attempts to woo poor voters in the drylands, and how development is shaped by political competition between the Congress which rules the central state and implements watershed development, and the BJP which delivers state government development schemes. Fieldwork for this dissertation was conducted in Dahod district, eastern Gujarat, the epicenter of the worst episode of collective violence against Muslims in postcolonial India in which the BJP-led government in Gujarat is widely considered complicit (HRW, 2002). This eroded support for the BJP in Dahod and turned it into a battleground district for both the Congress and BJP to win an election and score larger political points. Panchayats are implicated in political parties' electoral contests because sarpanches are vote-brokers for parties. A study in Dahod enables understanding how panchayats' significance deepens political competition in the locality

to control the panchayat, and the role of clientelist politics in shaping panchayats' distributional decisions.

On the basis of 18 months of ethnographic fieldwork combining a range of qualitative and quantitative techniques, I explore how market-driven development policy, grassroots democratization and market structures interact with social norms to shape agrarian change in eastern Gujarat. In the context of neoliberal governmentality or the state's delegation of governance to non-state actors, the dissertation focuses on the ways in which electoral politics, transaction costs, and the politico-social processes of forging markets shape the organization of market-driven development and the distribution of its gains.

The Interaction of Formal Institutions with Informal Rules

Policy is shaped by the spatial context in which it is implemented. Market-driven development and democratic decentralization interact with social norms in small-scale societies to shape the governance of development. The drylands are commonly considered egalitarian because of relatively low land inequality (e.g. Shah, Banerji, Vijayshankar, & Ambasta, 1998). However, there are political forces at work in access to, control over and transformation of landscapes (Blaikie & Brookfield, 1987; Peet & Watts, 1996; Robbins, 2004). Property rights to land, water, forests and grasslands which shape household well-being, are the outcomes of political struggles and interests, and property rights enable actors to control the stream of benefits from these resources. Social organization in semi-arid India is on the basis of the lineage which traces its descent from a common male ancestor. 'Settler lineages' that founded a village control high-quality land which enables them to invest in well-deepening. Wells are inherited with land and

are deepened jointly by kin, therefore kinship, lineage and identity shape control over land and water in rainfed areas.

Power is also shaped by patterns of social structure such as caste-tribe relations which accord disproportionate power to cultivator-castes relative to tribes and 'untouchable' castes. Tribes are called Adivasis (literally, indigenous people) and castes that are considered 'untouchable' by upper caste Hindus are called Dalit (literally, the broken and oppressed). Identity is a source of power, and Kolis- a cultivator-caste in Gujarat, Adivasis and Dalits do not intermarry. Kolis do not eat with Dalits and Adivasis; accept food cooked by them or water served by them. Kolis have better-quality land than Adivasis and Dalits, higher well-ownership, higher access to institutional credit through cooperative banks and greater representation in government employment. Rules of interaction between Kolis on the one hand and Adivasis and Dalits on the other accord more power to Kolis, and these rules are seldom violated because violation may result in banishment from the village or humiliation.

Social recognition, identity and the capacity for agency are closely related (Kabeer, 2002). Social actors have differential abilities to realize their interests due to differences in their resource endowments (Agarwal, 1997), and experience constraints on their agency which may be imposed by more powerful actors on less powerful ones. Power shapes social actors' bargaining advantage in their interactions with others to secure watershed development's material technologies.

Small-scale societies maintain social order through informal rules of governance which are enforced in the locality without relying on the higher authority of the state (Taylor, 1982). Informal governance structures interact with panchayats to order

communal life. In eastern Gujarat, informal governance mechanisms include the dispute mediation process or ‘council of elders’ called the *panch*, and the institution of headmanship called *patlai* which preceded Panchayati Raj. Interpersonal disputes within the lineage are resolved by lineage leaders who are usually wealthier men that own perennial wells, which means that lineage leaders are non-migrants and receptacles of collective memory.

Serious disputes over land, wells, livestock, implements, marriage and violence are resolved through the *panch* (literally, ‘group of five’) comprising all lineages’ leaders. The *panch* involves two or more lineage leaders who mediate on disputants’ behalf, listen to each disputant’s account, establish wrongdoing and determine a fine. Disputants avoid going to the police or courts because the police demand bribes and court cases involve traveling to the district court which has several years’ backlog and a case might drag for many years without resolution (Krishna, 2002). Therefore informal institutions (informal in the sense that they are not codified into laws, although they are in fact very formal in the way they function) play a critical role in resolving disputes and sanctioning offenders. Lineage leaders impose graduated sanctions on wrongdoers, first imposing a fine, then prohibiting the use of shared wells and motors, and finally turning the offender to the police. Because of their power of sanctioning, lineage leaders exert control over community affairs, the panchayat and development; and control over the panch accords social actors considerable power.

The institution of *patlai* or headmanship was initiated in 1960 when the state of Gujarat was carved out of Bombay state after the success of the Maha Gujarat (Greater Gujarat) movement in demanding a separate state for Gujarati-speaking people. The

Mamlatdar or district tax collection officer conducted interviews with candidates from each village to appoint a suitable candidate as headman to collect tax and govern village life. Interviews were held periodically to appoint a new candidate. Patels maintained communal peace and reported serious offences to the police. The patel received an annual payment (*paagdi*) and non-taxable land in exchange for his services. Because of their familiarity with the law and local administrators, senior patels are still called upon by sarpanches to resolve serious disputes over forests, murder and violence, and may even have more authority in the internal matters of a village than the sarpanch. Patels both supplement the panchayat's authority and are a countervailing institution to the panchayat, and the office of the patel accords extensive power in the locality. This dissertation explores how market-driven development policy and democratic decentralization interact with informal institutions of governance that carve out jurisdiction over justice and fairness in the locality and are a significant counterpoint to panchayats.

In the next section, I outline the theoretical framework that informs the dissertation and situate watershed development's upward distribution of development within economic reforms in India and transformations in global dryland development policy.

Theoretical Approaches

Understanding development as a process of planned social and economic change (Hobart 1993); I conceptualize watershed development as a strategy of institutional change to bring into being market-based production in the drylands. Institutions are humanly devised constraints that structure social interactions because they specify the

rewards and punishments of specific actions (North 1990). Institutions include both codified laws and informal norms, codes of conduct and conventions. Policies are a special case of institutions that allocate resources to achieve certain state goals, incentivize certain behavior on development subjects' part, and achieve larger objectives of social and economic progress.

Some accounts of institutional emergence and change such as North's (1981) and Barzel's (1989) suggest that social actors design institutions to meet collective needs of gains from exchange, cooperation or coordination. These accounts suggest that actors select those institutions that provide collective gains over those that do not, and institutions move in the direction of constant improvement as less efficient institutions are weeded out in favor of more efficient ones. However, such a conception does not account for the gap between individual motivations to secure the greatest gain from an institution and institutions' collectively beneficial outcomes.

Accounts such as Knight's (1992), Libecap's (1989), North's (1990) and Agrawal's (1999) recognize that while institutions may achieve valuable outcomes such as gains from exchange, coordination and cooperation, they need not distribute these gains equally. Moreover, these gains are not the primary motivations that drive the creation of institutions, but the distributional conflicts inherent in shared social activities are the drivers of institutions. The shared nature of the benefits of an institution means that actors try to create an institution that gives them a distributional advantage from a joint endeavor, and powerful actors may be able to impose their institutional preferences on less powerful ones.

Accounts such as Knight's (1992), Libecap's (1989), North's (1990) and Agrawal's (1999) are more plausible conceptions of institutions because they place they identify distributional conflicts as the driving mechanism of institutional change. Knight's (1992) account is particularly compelling because it makes the simplest assumption: that social actors do the best they can given what others are going to do, and therefore asymmetries of power are critical in influencing the nature of institutions and processes of institutional change.

I use this formulation to understand watershed development as the product of the ascendance of a market-driven paradigm in macroeconomic and development policy-making, leading to the neoliberalization of development policy for the drylands inhabited by the vast majority of India's poor. The Indian state's adoption of a neoliberal policy paradigm since the 2000s is exemplified by a shift in the state's rhetoric of citizenship from the poor to the middle class, from emphasizing the development of human capabilities to underlining individual self-reliance, from agriculture to business as the backbone of economic growth (Rao, 2007), deeper tax concessions for businesses (Kohli, 2006), the adoption of a liberal democratic order based on the principle of market expansion and nurturing Indian corporations' growth (see Singh, 2007), an outward-oriented economic approach of integration in the global economy (Frankel, 2005), the weakening of environmental regulations (Menon & Kohli, 2008), the weakening of labor laws, the commodification of natural resources (GOI, 2005) and withdrawal from strengthening human capabilities such as by cutting down on food security for those subsisting close to and below the poverty line (Hindu, 2007).

I draw upon Ostrom's (1990) conception of nested institutions wherein lower-level institutions are shaped by rules set by higher-level institutions to understand watershed development as nested within pro-market economic reforms by the Indian state since the 2000s. Watershed development constitutes a technology of neoliberal social and economic change in the drylands, which has transformed from the 1990s to the 2000s from subsistence food security to cash-crop production, from state improvement of public land to investing in private cultivated land, from delivering micro-credit for meeting subsistence needs to delivering it for commodity production for external (both domestic and international) markets, from environmental regeneration to natural resource extraction for cash-crop production, from soil and moisture conservation for collective needs to dam-building for water-intensive cash-crops, and from employment-generation in labor-rich and high-unemployment regions to capital-intensification.

Watershed development was rechristened 'Hariyali' (Greenery) in 2003, shifting from environmental regeneration to natural resource extraction through dam-building for irrigation, and from improving the commons on which the poor rely disproportionately for subsistence to investing in cultivated land owned by well-off households. Watershed development embodies capital-intensification of development policy, privatization of technologies of soil and moisture conservation, and upward distribution of policy instruments to owners of flat land, wells and irrigation motors who can lift dam-water and channel it to their fields.

Watershed development dovetails into the transformation of Indian agricultural policy in the late 1990s from food self-reliance to profit generation, state withdrawal from investment in agriculture, a shift from food-crop based research to cash-crop

centered research, and within food-crops, a shift from research on affordable staples to high-value crops for urban markets, and farmers' integration with increasingly volatile global markets. Watershed development's transformation is also situated within policy shifts in global policy organizations such as the International Food Policy Research Institute (IFPRI) and the Consultative Group on International Agricultural Research (CGIAR), and financial institutions like the World Bank which have advocated market-based development as a vehicle for poverty-reduction in semi-arid areas since the late 1990s (e.g. Braun, 2005; GOI, 2006a, 2008; IBRD, 2008; e.g. IFPRI, 1999; Rosegrant, Cai, Cline, & Nakagawa, 2002).

Watershed development is labeled 'the second green revolution', (GOI, 2006a), echoing the first green revolution which channeled commercial high-yielding seeds, pesticides and fertilizer to irrigated districts to increase agricultural productivity. While the new seed technology was assumed to be scale-neutral or deliver the same increase in output per unit of input, the technology required access to irrigation and credit to purchase the new commercial inputs, putting wealthy farmers at an advantage in cash-crop production. Watershed development signifies the expansion of the green revolution to frontiers of commercial agriculture accompanied by knowledge of the technology's inequality-deepening effects, and raises questions about how the technology is distributed in the resource-poor drylands inhabited by cash-strapped households, what its consequences are, and how people respond to it, which are the themes of this dissertation.

Development is a tool of bringing about agrarian and economic change (see Evans, 2004; Ferguson, 1990; Gupta, 1998; Peters, 1994; Subramanian, 2009), and watershed development is a strategy of technological, financial and institutional change

that integrates the drylands with new circuits of capital, credit and commodities in the 21st century for market-driven growth in dryland agriculture. In the next section I describe the shift in watershed development from labor-intensive to capital-intensive technologies from the 1990s to the 2000s, and link these changes to changes in macroeconomic policies and the neoliberalization of the state.

Watershed Development's Policy Trajectory from the 1990s to the 2000s

Watershed development was crafted in the early 1990s by combining interventions focused on natural resource management and poverty alleviation in semi-arid areas under one umbrella, including the Desert Development Program, the Drought Prone Area Program and the Integrated Wasteland Development Program. The drylands have low and erratic rainfall spread unevenly over space and time and their growing season is just 90-150 days compared to 170-210 days for irrigated districts (Shah et al., 1998). These regions are inhabited largely by small farmers owning one to two hectares of land (one hectare equals 2.47 acres), marginal farmers owning less than one hectare of land and landless households.

The drylands are food-insecure and the vast majority of people undertake migration to meet food needs, and rely on communal resources for food and fodder. In eastern Gujarat, 76 per cent households are unable to meet their food requirements for more than six months a year and many do not produce enough food for more than two to three months (Mosse et al., 2002). Most households migrate as wage laborers after the rainfed cultivation season- from 65 per cent in eastern Gujarat (Mosse et al., 2002) to 52 per cent in central India (Deshingkar & Start, 2003). Households depend extensively on natural resources on public lands to meet food, fuelwood and fodder needs (Jodha 1995).

Natural resources comprise 17 to 23 per cent of poor households' income in the drylands and 69-84 per cent depend on them for grazing (Jodha, 2000). Public lands and commons provide fruits, tubers, berries, leaves and grass for fodder, fuelwood and house-building and implement-building materials.

In the 1990s, watershed development consisted of labor-intensive technologies to regenerate public lands including village ponds, forests and grazing lands which attained the dual objectives of ecological security and employment-creation. These technologies included contour-bunding (building earthen embankments on sloping grazing lands to reduce soil erosion and conserve water), contour-trenching (digging moisture-conserving trenches in public lands to prevent soil runoff), gully-plugging (plugging soil-depleting water channels with stones and vegetation), and field-bunding (raising earthen embankments around fields to conserve rainwater). Activities on public lands had a strong redistributive effect because less well-off households participated in them to a greater extent than well-off ones. Additionally, wage employment enabled purchasing foodgrains and ensured food security.

In the late 1990s, the Indian state's largest watershed development intervention funded by the Council for the Advancement of People's Action and Rural Technology (CAPART), an autonomous body under the aegis of the central state's Ministry of Rural Development shifted from ecological restoration to irrigation expansion and from labor-intensive techniques targeted on public lands to the improvement of private cultivated land. The shift in watershed development, which has been the single-largest development intervention for the drylands inhabited by the largest proportion of India's households subsisting below the poverty line, signifies broader trends in the post-liberalization state,

including the state's withdrawal from public goods' provision, the privatization of development policy wherein policy instruments channel collective resources to private beneficiaries, the upward redistribution of development policy from poorer to better-off families, the shift from state emphasis on human capabilities to fostering entrepreneurial proclivities, and switch in state orientation from being a buffer between the market and vulnerable social groups to linking vulnerable groups deeply with markets.

In watershed development, this policy shift is constituted by a move from water-provision for drinking needs and livestock to augmenting irrigation for cash-crop production. For instance, in a circular to district officers, the Department of Panchayats, Rural Housing, and Rural Development of the Government of Gujarat emphasized terminating tank-deepening which generates water for subsistence needs and massive wage-employment to generating irrigation potential for cash-crops instead:

'Physical works in public lands such as digging a new tank, strengthening the embankments of a tank, or deepening an existing tank may not be attempted.... instead, stone dams, check dams and earthen-cum-check dams... should be built' (GOG, 2005a).

Harnath Jagawat, Dahod's largest development NGO Sadguru's director and a member of Gujarat's state-level Watershed Development Training Committee and Monitoring and Evaluation Committee, confirms the capital-intensification of watershed development in Gujarat:

Soil and moisture conservation (comprising labor-intensive activities), is fundamental to any watershed. That has to be the highest priority. In Gujarat

that's missing. In Gujarat bureaucrats have said 'You can't build field bunds, deepen tanks, or undertake earthen works.'

Watershed development's capital-intensification in the late 1990s was accompanied by the intervention's administration being transferred from CAPART to the Ministry of Rural Development's Department of Land Resources, bringing the policy firmly within state control. The Department of Land Resources now channels funds directly to the District Rural Development Agency- the highest development agency in a district, the lowest administrative level in India, which channels funds to NGOs.

Kashiben Kanasiya, a watershed development specialist in the NGO Anandi remarks:

CAPART and the DRDA work very differently. CAPART used to focus on earthen bunds. The DRDA has done away with earthen bunds.... with whichever works generate more employment, are labor-intensive and involve earthwork. Now the unwritten rule for NGOs implementing DRDA-administered watershed development is to build check dams. Every time the DRDA releases an installment of monies, it tells us 'Build a check dam or check wall.'

Dams are emblematic of the 'upward distribution' (Sundar, 2011) of dryland development policy favour of capital. Eighty per cent of a dam's funds are channeled to cement manufacturers and retail stores; contractors who rent out concrete mixers and water tanks; and tractor-owners that transport materials from stores to dam sites. Laborers receive only twenty per cent of the outlay on a dam. In effect as well, dams channel water resources to owners of deep wells with irrigation motors that can lift dam-water with pipes and channel it to their fields. Production categories link social groups, property rights and physical space (Pigg, 1992), and watershed development's policy texts (GOI,

2003, 2006a, 2006b, 2007a) articulate the ‘farmer’ (*khedut*) (GOG, 1998)- the irrigator, owner of flat land, and holder of perennial wells as the representative dryland inhabitant, shifting citizenship from subordinate groups to owners of property.

While policy-making and implementation are typically assumed to be collective because development policy is delivered to a community as a whole, insights from distributional accounts of institutions suggest that development policies are better thought of as contested and partial. In this project, I examine how distributional rules embedded in watershed development policy interact with social norms in the drylands to shape the outcomes of market-based development.

Before proceeding, I distinguish between institutions and organizations. Institutions are sets of rules that structure interactions among social actors, while organizations are groups of actors governed by particular rules. However, some entities can be conceptualized as both institutions and organizations, such as the enterprise, the bank or the panchayat, which is a practice I will follow in this study. The next section describes the formal structures of watershed development’s implementation.

Implementation Structure

Watershed development is implemented by the Department of Land Resources of the Ministry of Rural Development, Government of India. Seventy five per cent of the intervention’s funding comes from the central government and 25 per cent from the state government. Both the central government and state government channel funds to the District Rural Development Agency. The District Development Officer, the highest level civil servant in a district from the Indian Administrative Service, the mythologized steel frame of India, oversees the intervention’s timely execution and quality of

implementation. The District Rural Development Agency is in charge of the day-to-day administration of watershed development. The District Rural Development Agency's Director and Deputy Director, bureaucrats from the state government's civil service which is subordinate to the central government's civil service, report to the District Development Officer on progress in implementation.

The District Rural Development Agency selects villages to implement watershed development, and with emphasis on state-civil society partnership in development, appoints a 'lead NGO' to recruit and train district- and block-level staff. The District Rural Development Agency's officers meet with contractually recruited staff every month, report progress on achieving targets to the Department of Land Resources, and implement new activities on the basis of policymakers' feedback. To be eligible to become a lead NGO, an NGO must have implemented more than 30 watershed projects and have an annual turnover of more than 2,000,000 rupees. This gives large-scale technocratic NGOs an advantage in becoming lead NGOs.

With the decline in the state's role as an employment provider since the 1990s, there has been a sharp reduction in long-term employment and a marked rise in contractualization within the state, with many governmental functions being carried out not by government employees in salaried positions but by contractual hires. The lead NGO recruits contractual staff and acts as a legal buffer between contract staff and the District Rural Development Agency, protecting the agency against contractual employees' potential demands to be made permanent government employees (GOG, 2005b). The lead NGO rather than the District Rural Development Agency issues newspaper advertisements to recruit staff; evaluates candidates' performance in written

examinations, conducts interviews jointly with the District Rural Development Agency and issues letters of appointment.

The lead NGO is assisted by a district-level Multi-Disciplinary Team comprising a district-level micro-credit expert, an irrigation expert, a community mobilization expert and an agricultural expert, who are also contractually hired. The ‘soft’ and messy tasks of participatory rural appraisals which involve interacting directly with communities and the lowest-level staff in the watershed development apparatus are delegated to the lead NGO and district-level experts. The District Rural Development Agency also disburses funds to the Block Development Office at the block, the administrative level between the district and village comprising a cluster of 20-30 villages, which in turn disburses funds to communities.

At the block, watershed development is implemented by a block-level watershed development team. This team comprises an agriculture extension specialist or livestock specialist, an irrigation engineer and a social development expert. The watershed development team is supervised by a ‘nodal officer’. Dahod has seven watershed development teams, one for each block, with a total of 28 staff. Watershed development is a five-year intervention and is extended to a new cohort of villages every year. The watershed development team implements the intervention in villages at different stages of implementation at any given time. The watershed development team conducts participatory rural appraisals; gives technical expertise on irrigation, cash crops and micro-credit to village level farmer groups, micro-credit groups, water-user groups and the village watershed development committee; and delivers funds for activities through the village watershed development committee.

The state is limited in its ability to rule based on limits on its ability to know, and builds partnerships with local leaders to enact development (Sivaramakrishnan, 1996). At the village level, watershed development is implemented by a village watershed development committee which is headed by the sarpanch who is elected by the entire electorate of a panchayat. The village watershed committee comprises the sarpanch, a ward member representative and one representative each from the village level farmers' groups, 'self-help' groups who access micro-credit, and 'user-group' who use natural resources, reflecting development actors' deployment of groups as new sites of improvement. Additionally, the committee includes a representative from the block-level watershed development team and the nodal officer. However, in practice, decision-making powers, control over the disbursement of funds, and execution of activities rest with the sarpanch, making the sarpanch and the panchayat salient analytical units.

In the next section I provide a brief outline of the remaining chapters of the dissertation.

Outline of the Study

This study explores how neoliberal development interacts with democratic decentralization to shape watershed development and the distribution of its gains. I focus on the role of political competition and clientelism in panchayats in shaping the distribution of watershed development's material technologies, and the limits of democratic politics in achieving distributional justice. In the context of the state's devolution of governance to community actors, I highlight the role of transaction costs in influencing the organization of micro-credit groups; and how asymmetries of information, resources and countervailing power over panchayats between group-

members and group-leaders gives group-leaders disproportionate control over loans. Finally, I show how commodity markets are not only economic but also social and political entities shaped by power relations between dryland commodity producers and monopsonistic firms, with prices paid to producers being indexical of these power relations. Firms' priorities of maximizing production vest local organizational power with the wealthiest producers, and household-level commodity production is shaped by local politics.

Chapter 2 describes the field site and methods. Chapter 3 describes the significance of Dahod as a site of political competition between the Congress and BJP to capture state power, and how watershed development is shaped by panchayats' implication in large-scale politics. Watershed development is an instrument of political patronage and is the outcome of political competition between parties to woo voters. Panchayats' implication in large-scale electoral politics vests sarpanches with extensive power and panchayats are sites of intense competition among local leaders not only to shape village development but also channel votes to political parties and secure higher political office. Panchayats' significance in the locality and the channeling of vast resources to panchayats are intimately tied to their significance for macro politics.

Chapter 4 describes how the capital-intensification of watershed development is mediated by electoral politics. With watershed development's devolution to panchayats, distribution in the locality is shaped by the timing of elections and the political agency of vote-brokers. Voters secure development not simply on the basis of their electoral size but their ability to make a credible threat of withdrawing support from a candidate, and

groups that are least dependent on development patronage for economic advancement secure the greatest proportion of watershed development.

Chapter 5 explores how neoliberal governmentality and the devolution of micro-credit's governance to contracted employees and communities impose the transaction costs of banking on self-help groups. Lineage leaders become the locus for organizing self-help groups based on their capacity to sanction group members, their mutual vulnerability with the sarpanch who disburses loans, and their ability to interact with external actors. Shifts in bargaining advantage between leaders and members from the collateral-building to the loan-taking stage create space for leaders' usurpation of loans.

In Chapter 6 I show that commodity production is facilitated by earlier forms of capitalist production in eastern Gujarat, and the market is not something that stands above society but is organized through inherently political means and social relations. This chapter explores the politics of commodity pricing involving the state, locality and market which determine commodity producers' returns from market-based production and unsettle policy declarations of commodity-production as a wealth-generation strategy. I unpack 'economic value' to foreground the elisions of value involved in market-based production, and power relations of class, geography, caste, gender and economic ideology that inflect commodity pricing. Chapter 7 concludes with the findings of the study, recommendations for policy and directions for future research.

2. Ethnographic Setting, Field Site and Methods

This chapter describes the social, economic and political context of Gujarat, Dahod district, and the methods employed in the dissertation.

Capitalist Pasts and Neoliberal Presents in Gujarat

Gujarat is a historically capital-friendly state shaped by a past of mercantile capitalism enabled by a long coastline and proximity to ports. Gujarat was a center for tobacco, cotton, textile and gem production from 1700-1930. This led to the rise of a powerful industrial, mercantile and commercial class in the region. Gujarat's dominant social groups comprise Brahmins, Vantias, Patels and Patidars- middle and upper-castes who control most agricultural land in the state. The class-caste alliance of Brahmins, Vantias, Patels, Patidars, business owners and commercial interests in Gujarat has consistently emphasized private property, free reign for business, and state investment in industrial development rather than redistributive policies.

The Congress ruled Gujarat from 1960-75 and prioritized private enterprise in the state, with the party being led by pro-entrepreneurship leaders Sardar Vallabhai Patel and Morarji Desai. These leaders emphasized private-sector led industrialization and increasing agricultural output by delivering canal irrigation and credit to large landowners rather than undertaking land redistribution. Unlike other industrialized states where leftist political parties such as the Communist Party of India have a larger or smaller presence, the organized Left has not had a strong presence in Gujarat except for a brief period in the 1970s when the Janta Party-led coalition government led the state. The lack of the organized Left's presence is attributed to Mohandas Gandhi's influence over Gujarat's business community in the early 20th century to extend concessions to workers,

so that labor-capital relations did not have the same antagonism in Gujarat as in other states.



Figure 1 Location of Gujarat in India

The state is not an entity that stands apart from society but comprises actors who bear social identities (Migdal, 1994). The Gujarat government's bureaucrats embody the entrepreneurial spirit of dominant Gujarati society. India's federated structure gives regional states considerable autonomy in designing economic policies, and the Government of Gujarat's bureaucrats have worked closely with the central state to attract private investment to Gujarat (Sinha, 2003). With the rise in regional states' power with respect to the central state in the post-liberalization period (Rudolph & Rudolph, 2001; Sinha, 2011), the Government of Gujarat has emerged as the flagship state of market-driven development in India, particularly under the rule of the explicitly the pro-capital BJP since 1995. In the post-liberalization period since the 1990s, Gujarat awarded the second-highest number of mining leases to the private sector (Lobo & Kumar, 2007), and for 2000-2006, garnered the sixth-highest foreign direct investment in the country worth 4,112,730,000 rupees (\$82,254,600).

In urban areas, liberalized governance has taken the form of privatization of public spaces, devolution of civic services to private corporations, exclusionary urban renewal that has driven the poor, religious minorities and lower castes to the city's margins (Chatterjee, 2009), labor-displacing investment (UNDP, 2004) and the deployment of public resources for 'pseudo-public spaces' (Hayward, 2011) of consumption and leisure. In the case of rural development, the Gujarat government has articulated a 'government to business' policy and has taken the lead in using information and communication technologies for gathering market-related information at the village, block and district- panchayats (GOI, 2006c). Training manuals for rural development

urge district-level bureaucrats to monitor market trends, advise Block Development Officers- the highest-level development officers at the block to identify profitable activities for rural producers to undertake (GOG, 2007), advocate e-marketing commodities through district level cooperatives and exhort self-help groups to produce marketable goods.

Market-driven development is facilitated by older forms of commodity production in semi-arid communities that are already implicated in capitalist economy in Gujarat. Gujarat has well-developed rural roads and state highways which link producers with input markets, crop markets and veterinary services, and facilitate information-gathering through easy access to market towns. There is congruence between the central state and Gujarat state on technological preferences in watershed development including dam-building, extending high-yielding seed varieties, fertilizer and pesticide to perennial-well owning farmers, extending micro-credit contingent on commodity-production, and connecting producers to cooperative enterprises for selling high-value commodities.

With the rise of a federal market economy since the 2000s, public-private partnership has been an ascendant feature of the Indian state's development policy. There is congruence between the goals of market institutions such as commercial banks and cooperative commodity enterprises and the state government in Gujarat regarding rural monetization, input-intensification and value-added agriculture. In Dahod district in eastern Gujarat for instance, the District Development Officer has ardently promoted commodity production as a development strategy 'to increase GDP and per capita income five-fold'. Congruence between the state and market on implementing market-driven development combine to produce a highly capital-intensive form of watershed

development in Gujarat, making Gujarat a compelling site to study how market-based development unfolds in the drylands, the mechanisms through which the state links remote communities to financial and commodity enterprises, market-based development's interaction with democratic decentralization, its mediation by informal rules of governance in dryland communities, and the way it articulates with the aspirations of dryland subjects. Hariyali is implemented in all seven blocks of Dahod district. In 2007, the intervention was implemented in 355 villages in Dahod, and by 2008, the intervention was implemented across 84,000 hectares.

Dahod's Empirical Significance and its Social Groups

India's drylands have received little analytical attention compared to agrarian regions and forested environments in South Asia which have been the staple of South Asian agrarian studies and environmental studies respectively (e.g. Baviskar, 2005; D'Souza, 2006; Dubash, 2002; Gidwani, 1996; Gururani, 1996; Mosse, 2003; Pandian, 2009; Saberwal, 1997; Sivaramakrishnan, 1996; Skaria, 1999; Sundar, 1995). Scholarship on Gujarat's many margins has explored social and economic change in agrarian environments (Dubash, 2002; Gidwani, 2008), forests (Skaria, 1999) and pastoral communities (Mehta, 2005), but semi-arid communities that are part-cultivating, part-wage-migrating and part natural resource-dependent defy categories, and this dissertation attempts to fill the gap in scholarship on these hybrid zones.

Dahod lies in the semi-arid tropics and is known as the eastern gateway of Gujarat. The Mughal ruler Aurangzeb was born in Dahod fort in 1618 and gave its chiefs territories in return for guarding the Satpura passes. Dahod's inhabitants comprise Bhils, the largest tribe in western India, and Kolis, lower-caste cultivators that have lived side

by side with Bhils. Kolis are small farmers owning less than two hectares of land and are concentrated in Limkheda block. Kolis own the flattest land and deep wells ranging from 60 to 70 feet in depth, indicating a long history of iterative well-deepening and surplus production.

Kolis venerate saints of the Bhakti movement popular from the 14th to 17th century which produced the saints Mirabai, Tukaram, Namdeo, Surdas and Kabir, many of them from ritually ‘polluting’ castes who rejected Brahmanistic rituals and emphasized every being’s capacity for unmediated oneness with God through devotion. Kolis in eastern Gujarat generally worship Surdas and Kabir. Despite the Bhakti movement’s egalitarian roots, Kolis live in greater proximity with caste Hindus and consider themselves hierarchically superior to Adivasis and Dalits. In Gujarat, status among lower castes is shaped not only by occupation but also by eating meat. Kolis assert ritual superiority over Dalits by not eating beef and mark themselves as superior (*sudhrela*) to Bhils by means of rituals of daily bathing and not drinking liquor. However, these rules are transgressed in daily life, and on the ground, Kolis and Adivasis are not distinct groups but fluid boundaries, with many Kolis in particular not distinguishing themselves from Adivasis. Instead, Dahod’s social groups define themselves contingently as Koli, Adivasi, Hindu, or by none of these macro categories but instead by their lineage which draws its descent from a common ancestor, and which is the most salient marker of identity in eastern Gujarat.

Adivasis in eastern Gujarat comprise Bhils on whom anthropological scholarship abounds. Bhils practiced both cultivation and hunting and gathering, and fully settled and tax-paying Bhil peasants, occasional-cultivator Bhils and hunter-gatherer Bhils lived side

by side (Roy Burman, Choudhuri, & Mishra, 2004). The histories of the Bhils in eastern Gujarat are enmeshed with the ideological proclivities of their historiographers who constructed Bhil history to fit with larger narratives of particular orders like Rajput power, Mughal pre-eminence, or, since the 1990s, a pan-Hindu nationhood. Historical accounts variously suggest that Bhils were a tribe, that they were upper caste Rajputs (a warrior-caste) driven to the forests of eastern Gujarat, and that an autonomous Bhil ruling group, neither tribal nor Hindu was driven to the forests by the Rajputs.

Statemaking, Appropriation and Resistance

Eastern Gujarat has always been implicated in broader forms of ‘statemaking’ or the state’s attempt to penetrate society, extract and appropriate resources, exact compliance and govern social relations (Migdal, 1988; Sivaramakrishnan, 1999). The colonial state tried to induce forest-based tribes to switch to cultivation because land was abundant but labor was scarce, therefore labor was highly prized (Sundar, 1995). Settlement officers gave tribal chiefs titles, *pagdis* or tax collection rights and extra shares of village land to persuade them to settle people. Settlement officers also granted individual concessions to Adivasis to induce them to cultivate land rather than inhabit the forest (BPA, 1903). Officials carefully monitored the expansion of settlements (BPA, 1902a) and extracted rent from cultivators (BPA, 1902b).

Eastern Gujarat has a long history of irrigated agriculture, surplus production, and state investment in irrigation to increase agricultural productivity. Wholesale crop markets operated in semi-arid central India by the 1860s. In 1899, farmers in Pathari State in central India grew not only the staples of barley and maize but also wheat and rice which were urban grains (BPA, 1899). Cultivators in eastern Gujarat grew rice,

wheat and yellow gram for market sale, with 21 per cent land under gram cultivation in 1877-88 and four per cent under wheat in 1898-99 (Hardiman, 1988). The state incentivized irrigation for cash-crop production, and since at least the 13th century, Gujarat's rulers encouraged well-deepening to be able to tax irrigated land at a higher rate than unirrigated land.

From at least the 15th century onwards, Vantias (middle-caste Hindu) and Vohras (Muslim) traders-merchants who expanded their operations in eastern Gujarat became a major source of credit for well-deepening for cultivators (Hardiman, 1988). Cultivators often became indebted to these trader-merchants, who dictated crop choices and appropriated a significant part of the harvest as soon it was cut in the fields. After taking control over many parts of Gujarat in 1817, the British supported well-deepening through tax-exemption of irrigated cash-crops for two to eight years (Hardiman, 1998). The state intervened selectively to remedy Vantias' and Vohras' excesses because trader-merchants contributed to flourishing markets, but peasant revolts produced state response in the form of closer monitoring of Vantias' and Vohras' usurious lending practices.

By the 18th century, Bhils were experiencing immiseration due to both Vantias and Vohras and liquor merchants who sold liquor to Bhils and indebted them. This was worsened by the colonial state's ban on brewing *mahua* used to make *taadi*, local liquor. The aim behind the ban was to increase the state's revenues from taxes on liquor sale. The Bhagat movement, a reform movement among Bhils arose in various parts of western India in the 19th century in response to colonial laws evicting Bhils from forests and increasing intolerance of Bhil lifestyle and custom of hunting and carrying bows and arrows, growing Bhil immiseration due to indebtedness, and tightening control of

moneylenders over Bhils. Bhagats were Bhils who had given up meat, liquor, bearing arms and engaging in blood-feuds, took to daily bathing and settled cultivation, venerated saints in the Bhakti tradition, ‘reformed’ their ways and urged others to do so (Hardiman, 2003). Along with parts of southern Rajasthan and Madhya Pradesh, Dahod was the site of the Bhil leader Govind’s Bhagat movement around 1911. Govind emphasized non-violence, exhorted Bhils to give up carrying bows and arrows, advocated rejecting a life of violence and of cattle theft; advocated giving up alcohol and meat, and eschewing bride price. Govind also urged Bhils to refuse to do forced labor (*veth*) which both the princely states and the colonial state imposed on Bhils.

The Bhagat movement led to a fall in revenue from liquor tax for the princely states of Sunth, Banswara and Mewar and hurt these states’ economic interests (GOI, 1913b). Govind and 10,000 of his followers gathered at Mangadh hill on the border of Dahod and Banswara district, Rajasthan in November 1913 to assert their power, gain recognition from the colonial state, have it check local rulers’, trader-merchants’ and moneylenders’ exploitation, and perhaps try to form a separate territory (GOI, 1913a). While Govind was captured and sentenced to death, his sentence was reduced to 10 years’ imprisonment and Govind continued to preach after his release. Mangadh is the site of the largest gathering of Bhils in western India every winter to commemorate Govind’s movement, carry out commerce, find suitable matches for marital alliances and mobilize Bhils politically. The Mangadh fair is an important space for NGOs to raise their visibility among semi-arid communities and for parties to woo this politically powerful constituency in Gujarat, Rajasthan and Madhya Pradesh.

Gujarat's Bhils are regarded as the most mainstream of all Bhil groups in western India, with little distinguishing many of them from their Hinduized Koli neighbors. The Congress ironically contributed to Bhil Hinduization in Dahod and Panchmahal in the course of its famine relief work in the region in 1911 under the leadership of Amritlal Thakkar. The Congress's vision for Bhil advancement was mainstreaming them. Drawing upon Gandhi's emancipatory tropes which came from orthodox Hinduism and included Hindu hymns, advocating vegetarianism and prayer, Amritlal Thakkar established the Bhil Seva Mandal (Bhil Service Society) in Dahod in 1920 which initiated tribal education through its residential schools, using Hindu symbols in Bhil education. Bhil Seva Mandal contributed to crafting a new generation of Bhils that talked differently than their elders (in Gujarati rather than Bhili), dressed differently and gained social mobility through a measure of government employment. Due to its Gandhian roots, the Bhil Seva Mandal is closely affiliated with the Congress party. The Bhil Seva Mandal was a vehicle of vote-mobilization for the Congress until the 1980s, but its role in district politics has diminished since the rise of the BJP in Dahod in the 1990s.

Dahod was carved out of Panchmahal district in 1997 and spans 3,642 square kilometers. Dahod is cheek by jowl with Banswara district in southern Rajasthan and Jhabua district in eastern Madhya Pradesh. The 2001 census lists Dahod's population at 1,636,433, 14th out of 25 districts in Gujarat (GOI, 2001). Dahod is 91.45 per cent rural. The district has the second highest sex ratio in Gujarat, with 985 women per 1,000 men (GOI, 2001). Overall literacy is 46 per cent with male literacy being 59 per cent and female literacy being 32 per cent (GOI, 2001).



Figure 2 Location of Dahod in Gujarat

Ecology and Livelihoods

The district is dominated by low hills, shrubs and dry deciduous trees of *madhuca indica* (*mahua*), teak, sal, *butea moosperma* (*khakhar*), *tamarindus indica* (*khati aml*), *acacia catechu* (*khair*), *acacia nilotica* (*desi bawal*) and *gemalina arborea* (*sewan*). The region's low hills are crisscrossed by stream beds that gush with water during the rains in July and August. Dahod has low and erratic rainfall and periodic drought, as Table 1 shows. In recent history, the district faced drought or scarcity during 1980-1983, 1985-1987 (GOI, 1991), and 1999-2000. Excess rain in 2004 and 2006 wiped out the staple maize crop.

Table 1 Annual Rainfall in Dahod in Millimeters, 2004-2009

| Year | Total rainfall |
|------|----------------|
| 2004 | 1056.3 |
| 2005 | 529.6 |
| 2006 | 1199.3 |
| 2007 | 860.1 |
| 2008 | 529.9 |
| 2009 | 428.1 |

Fluctuation in precipitation and food production mean that livestock are a critical for economic security because they can be sold for cash in an emergency without having to resort to mortgaging land. Well-being is based not only on land ownership but also access to forests, grazing lands, watering ponds called tanks and stream beds for fodder. Village forests provide fodder, fruits, tubers, flowers, seasumwood, gum, resin, wax, bamboo, soapnut, grass for thatching roofs and making implements, and *tendu* and *khakhar* leaves for cigarette-manufacturing and plate-making.

People practice multi-pronged livelihoods combining migration, subsistence production and surplus production. Twenty four per cent households in Dahod are medium farmers, 34 per cent are small farmers, 27 per cent are marginal farmers and 19 per cent are landless (GOG, 2008). Most families cultivate on sloping, erodible, infertile upland plots solely in the rainfed (*chaumaso*) season from July to September and have food for no more than six months. The two main agricultural seasons are *chaumaso* and the winter cultivation season (*shiyaalo*) from December to February. The staple crops are local varieties of drought-resistant maize, upland varieties of rice and millets which are grown using conserved seeds. Only wealthier households with winter- and perennial-

wells grow winter-crops of wheat and gram, or summer (*unaalo*) crops of lentils, oilseeds and vegetables from April to June.

Livelihoods comprise agriculture, livestock production and migration as field-labor in irrigated districts to harvest cotton and barley (*bajra*) crops, and as laborers in the construction industry. Migration is a strategy of both accumulation and survival. Migration earnings are used to purchase seeds, fertilizer, deepen wells and repay loans. Not just the poorest but middling households also migrate, finding it a more viable strategy than cash crop production for accumulation because of widely fluctuating agricultural prices and high levels of risk in cash crop production. Due to widely fluctuating precipitation, even better off farmers maintain surplus foodgrains which can be converted into cash for market purchases of foodgrains, fertilizer, seeds, medicines, diesel and textbooks.

Settlement

Villages consist of scattered hamlets which are made up of houses set amidst their fields. Villages are bordered by grasslands, forests, streambeds, village ponds called tanks and sacred groves. Settlement is based on the lineage which draws its descent from a common male ancestor. Villages are patrilineal and patrilocal and lineages practice village exogamy, which expands social networks. Kolis and Adivasis have overlapping lineage names indicating their shared histories. Major lineages in Dahod include Baria, Chauhan, Patel, Nayak, Nayakda, Khat, Pageer, Vaghadia, Bhabhor and Patelia.

Each hamlet (*falio*) is founded by a single lineage but also includes sections of subordinate lineages who may have settled along with a dominant lineage. Over time, hamlets become more heterogeneous as new sections of a lineage bring distant lands

under cultivation and build their houses amidst their fields in farther hamlets. Households comprise both extended families consisting of an elder couple, their married sons with spouses, and unmarried children; and nuclear households comprising only a married couple and their small children, depending on how soon a couple is able to build its own house. The immediate family, kin and the lineage are the basis of exchange and the immediacy of social life.

The division of labor is gendered. Women manage livestock, clean sheds, graze, lop grass for fodder and water livestock. Both women and men migrate for work in poorer families, and only men migrate in wealthier families. Women exercise greater say than men over decisions on food crops and men exercise greater control over cash crops. Field tasks are gendered. Men perform plowing and women perform weeding, and both harvest grains and irrigate. Grain cleaning and processing is exclusively women's task. Kin pool labor for rice transplantation and wedding and death feasts.

Residence

Houses are thick-walled and built with mud mixed with straw. Dwellings have elevated mud flooring to keep the interiors dry in the rains. Koli houses are spacious and long with a broad verandah running along the length of the house. Beyond the verandah lie a single large room or one large room and another smaller one with an earthen stove, grain storage urns and a large area for tethering animals at night to prevent cattle theft and predator killing. Grains are stored in covered earthen urns (*kothi*) in both inner rooms and the verandah and are made with fine clay and earthen legs which keep them raised, dry and free of pests. Urns are three to six feet high and have a two-foot radius. House-building costs are high and require expenses on stones, cement, bricks, timber for beams

and roof tiles. Married sons continue to stay with their fathers, and as more sons marry and more space is needed for growing families, a new house may be built and two or more sons may move into it.

Property

Wealth is shaped by kinship. Land and wells are inherited through the male line. Widows', divorcees' and female inheritors' rights to land are relatively weak, and more so among the Hinduized Kolis than Adivasis. Kin pool resources to dig a well and wells are inherited along with land. The number of claimants to a well increase over time and each perennial well may have more than 15 households holding water-rights. Well-deepening is undertaken incrementally and inter-generationally, and each family may have water-rights in more than one well. Kin pool funds for well-deepening and repairs. Once a well is deepened, it may be lined with bricks and a stone rim be built around its mouth to prevent it from caving in. Farmers hire the services of *uddos*- well-digging experts to deepen wells. Both Kolis and Adivasis use the services of water diviners called *balvo* to identify the location of an aquifer. Well-digging is prohibitively expensive and requires investment of 50,000-60,000 rupees to pay for machinery, labor and dynamite to blast rocks.

Irrigation requires electric or diesel motors and rubber or PVC pipes which lift water from wells and channel it to fields. While wells are joint property, irrigation motors and pipes are privately owned or shared solely by siblings. Kinship promotes channels of communication and access to kin networks for tools, credit and information on development schemes.

Local Governance

Due to male-centric inheritance rules and village exogamy, leadership in local decision-making institutions such as the panchayat and *panch* is controlled by men. People bestow the title of leader (*agevaan*) on a dispute-mediator on the basis of his ability to enforce punishment and sanction offenders. While dispute-mediation vests lineage leaders with considerable power, it is also fraught with danger- if a lineage leader is considered unfair then disputants may not call upon their lineage leader but take their dispute to the sarpanch or patel for resolution, and this may harm the lineage leader's reputation. All ex-patels in a community are regarded as leaders and may be called upon to resolve disagreements.

The *panch* is not a standing body but a network of leaders who are contingently called upon to resolve disputes. Smaller disputes may involve just one or two dispute-mediators' intervention while larger disputes, including inter-lineage, inter-hamlet and village-wide disputes entail all lineage-leaders' involvement. Likewise, small misdemeanors may be resolved through sanctioning by hamlet-level leaders while murder or grievous harm leads to the intervention of the patel and sarpanch.

Credit Institutions

The lineage is the first source of credit for wealthy lineages. Most households lack access to institutional credit due to banks' demand of cash collateral. The Indian state created primary agricultural credit societies to meet small cultivators' credit needs, and Gujarat had 14,596 cooperative societies in 1962. In 1965, out of a rural population of 15,300,000; 14,900,000 were covered by cooperatives (GOG, 1965). Out of 19,017 villages, 18,531 were covered by primary agricultural credit societies which deliver

seeds, fertilizer and veterinary care (GOG, 1965). However, the extent of household coverage suggested by these numbers is misleading because cooperative credit societies require cash collateral just like nationalized banks. Only the wealthiest borrowers with diversified income through government employment, a lucrative political career, contracting or trade can borrow from credit societies. These wealthy borrowers secure credit at the lowest rates because cooperatives' interest rates are 1-3 per cent lower than nationalized banks.

Chaandlo is an informal credit institution that fills the gap between cash-strapped borrowers' credit needs and banks' rigid loan criteria and private lenders' usurious rates, including Vania and Vohra moneylenders, shopkeepers and cash-crop farmer-moneylenders. *Chaandlo* is a type of reciprocal clan-based credit institution activated in summer whereby a household with a major expense such as house-building or well-deepening sends invitations to clan members for a fund-raising meal. Invitees visit the borrower, partake a small meal, ascertain progress in the borrower's economic activity (i.e. well-building or house-building's commencement) and give a small cash gift ranging from 30-200 rupees depending on economic circumstance, proximity of kinship and extent of personal reciprocity. The number of *chaandlo* invitations a family receives indicates its standing in clan networks, and wealthier families receive more invitations. Wealth shapes how much money a family can raise in a *chaandlo*. The more *chaandlo* invitations a family responds to each year and gives cash gifts to, the more cash it can expect when it hosts a feast for a major expense in turn. Identity, lineage and personal wealth shape how much money a family can raise in a *chaandlo*. While a poor Adivasi

family may be able to raise only 4,000-5,000 rupees through a feast, a Koli family may easily raise 40,000-60,000 rupees.

Methods

This dissertation is based on ethnographic fieldwork conducted from August 2006 to January 2008. However, this was not my first experience in Dahod. I was fascinated by issues of social development in communities dependent on the environment, and had first gone to Dahod to do field research for a master's thesis on irrigation systems in semi-arid communities. I had conducted fieldwork in an Adivasi village in Garbada block and a Koli-dominated village in Limkheda block. My first field experience got me interested in local politics and power as the drivers of ecological change and development. I returned to Dahod in the winter of 2004-2005, interested in the role of local institutions and panchayats in shaping development. I conducted fieldwork in three communities- one comprising Bhils, Patelias who are Adivasis and regard themselves as hierarchically superior to Bhils; another comprising Bhils, Patelias and Dalits; and a third comprising Kolis and Bhils. In Bhil-dominated Dahod, the social status of Bhils in Bhil-dominated villages is very different from that in Koli-dominated villages, which kindled my interest in how patterns of social stratification were created and enforced, and how they interacted with development policies to shape different groups' social and economic mobility.

I had established contact with Sadguru and Foundation for Ecological Security which are among Dahod's largest development NGOs during my first fieldwork experience in 2000; and came to appreciate how communities did not accept NGOs' interventions on NGOs' terms but by appropriated development strategically to meet their own priorities. I also familiarized myself with the local bureaucracy at the district

headquarter, including the Forest Department, the Minor Irrigation Department, the Tribal Sub Plan, the District Magistrate's office, the District Development Office and the District Rural Development Agency. I was intrigued by how state agencies penetrated rural communities to execute goals of economic production, natural resource conservation and development, and the way policies were transformed on the ground through shifts in the locus of knowledge and power.

The Indian state's enactment of panchayati raj coincided with the resurgence of academic interest in democracy, and I became interested in how democratic decentralization influenced elected leaders' development strategies and development subjects' political engagement. I returned to Dahod for pre-dissertation fieldwork in December 2004-January 2005 and conducted fieldwork in a village inhabited by Bhil lineages, another village comprising Patelias (who regard themselves as superior to Bhils), Bhils and Dalits; and a third village comprising Kolis and Bhils.

The Choice of Ethnography

Ethnography involves understanding reality from the worldview of those being studied by living among them for a prolonged period of time, 'a fusing, however precarious', (Pachirat, 2009) of the researcher's 'life-world with the life-worlds of those she seeks to understand' (Pachirat, 2009). As an urban dweller who had grown up in a metropolis and was ignorant about dryland economy and society, extended fieldwork in a village was essential for me to understand forms of property, production, social and political institutions, and dryland communities' relationship with the state.

Knowledge is produced through theoretical and methodological vantage points from which research is conducted (Haraway, 1988; Harding, 2003). Epistemological

questions are not separate from ontological ones- which questions are asked critically shape what methods are best for answering them. Epistemological vantage points are also spatial vantage points (Pachirat, 2008). I was committed to staying in a locality implementing watershed development for an extended period of time to understand statemaking- the state's attempt to extract resources, exact compliance and govern social relations (Migdal, 1988; Sivaramakrishnan, 1999) from the perspective of those who were the subjects of state action. A commitment to understanding what watershed development and democratic decentralization meant for those experiencing them entailed long term fieldwork, as it turned out, ten months in a village implementing watershed development.

Ethnography relies on fieldwork, with the 'field' denoting a site of data collection, a method of collecting data and a location that provides an opportunity to understand social processes (Gupta & Ferguson, 1997). Ethnographic fieldwork involves studying people's actions in the social contexts in which they arise and engagement with the social, economic and political context of the field rather than isolating data from the contexts in which it is generated (Miller, 1997). Ethnography is a long-term commitment to an investigation that 'allows people to return to a daily life beyond what is performed for the ethnographer'(Miller, 1997), which reduces the reactivity of the research setting to the researcher.

Ethnography enabled accessing the 'everyday' practice of watershed development through the actions of ordinary actors in the state, community, market and political society, and the points at which the lowest level actors of these entities- district level bureaucrats and technocrats, block level staff, sarpanches, ward members, political

parties' leaders, lineage-leaders, self-help groups' leaders, bank managers, dairy managers and development aspirants came into contact with one another.

Village level fieldwork gave insight into how subsistence production was transforming and generated insight into cultivation's experimental nature, its aesthetics, the ideas, experiences, travels and inclinations that influenced agricultural techniques and crop choices; and people's keen understanding of cloud movements, surface water movements and groundwater flows. Living in a village was invaluable in grasping how macro structures impinged on daily life and gave insight into how geography was politically produced, such that the drylands were hinterlands for water, forest produce and foodgrains obtained cheaply; while the reverse flow of industrial inputs for agriculture, processed goods, building materials, health, education, electricity, clothes, shoes, medicines and transportation were dearly priced.

A commitment to ethnography embodies recognition that knowledge production is a social process, i.e. knowledge is co-constituted by the interaction of the researcher and the researched. Ethnography involves striving for objectivity through accountability and openness about the research process. The ethnographic method attempts to deepen objectivity by collecting data at multiple points of time to identify patterns of social structure and individual action. Ethnography relies on seeking multiple data sources to increase validity and gain contextual insight, including archival records, newspaper articles, oral histories, organizational documents, local reports and evidence gathered through participant observation, in-depth interviews, field observation and interactions with key informants.

The ethnographic method traces how the locality is produced through the actions of both local and non-local actors (Ferguson & Gupta, 2002). To situate the locality within larger institutions shaping actors' constraints such as democratic decentralization, state transformation and the devolution of governance to non-state actors, I undertook multisite fieldwork in Limkheda block, in Banswara district in Rajasthan, Panchmahal district in Gujarat, and the cities of Ahmedabad, Delhi and Bombay. At the village level, I used ethnography to build an account of the distribution of power and shifts in resource endowments and bargaining advantage among different social groups over time. In attempting to understand how panchayats were implicated in national parties' state-level and national-level electoral contests, I conducted fieldwork on political parties, and ethnography enabled extending the temporal thread of analysis on parties' moves back in the recent past by combining archival evidence with oral histories and newspaper reports.

Fieldwork on the locality, local actors and local institutions was conducted in Mahipura and Himmatpur villages in Limkheda block. Fieldwork on political society was conducted at the BJP and Congress's public meetings in Dahod, interviews with Dahod's BJP and Congress leaders, block-level bureaucrats, grassroots cadres of the BJP and Congress, sarpanches, lineage-leaders, peasant intellectuals and voters; walk-alongs with panchayat leaders; observation of village assemblies; participant observation of panchayat elections in December 2006; and newspaper research.

Fieldwork on markets was conducted at the Panchmahal dairy in Godhra, the Bank of Bandibar in Bandibar, markets in Limkheda, Devgad Baria, Jhalod and Fatehpura; and interviews with village shopkeepers and cash-crop farmers. Fieldwork on the state was conducted at the panchayat office in Mahipura and Himmatpur villages, the

Limkheda Block Development Office, the Limkheda Watershed Development Team's Office, the Division Forest Office at Baria, the Range Forest Office at Randhikpur, the District Rural Development Agency in Dahod, the Circuit House in Dahod, the Ministry of Rural Development in New Delhi, the Ministry of Agriculture in New Delhi, the Planning Commission in New Delhi, and archival research at the National Archives and Nehru Memorial library, both in New Delhi.

Selection of the Field Site

I began district level fieldwork in Dahod in mid-September 2006, securing housing, establishing a workspace and introducing myself to government agencies' and NGOs' representatives including the District Rural Development Agency's Director, Deputy Director and Assistant Deputy Director; and the NGOs Anandi, Pravaah, Prakruti Foundation, Bhil Seva Mandal, Mahatma Gandhi Pratishthan and Mahila Swaraj Abhiyan (Women's Self-Governance Movement). I familiarized myself with the routines of Gramin Vikas Trust, the Lead NGO and introduced myself to the district-level Multi-Disciplinary Team's members. My proficiency in Gujarati led to my being regarded as an insider by most people, and repeated fieldwork in Dahod had familiarized with the dialect of Gujarati spoken in eastern Gujarat, therefore I encountered no difficulty in communicating with people.

Dahod town has a flourishing grain and spice market (*mandi*). With banking sector reforms and private banks' entry in the drylands, the private-sector banks Housing Development Finance Corporation (HDFC), Industrial Development Bank of India (IDBI) and Industrial Credit and Investment Corporation of India (ICICI) have opened their branches at the district headquarter in 2006-2007, and report profitable returns from

providing credit and insurance services to cash-crop farmers. The district-headquarter is dominated by government offices, NGOs, nursing homes and a sprawling Western Railways residential colony. Smaller towns include the block headquarters at Limkheda, Baria, Jhalod, Fatehpura and Santrampur and the market towns of Piplod, Morwa and Bandibar. Market towns and block headquarters have intense activity, with health clinics, banks, grain traders' stores, clothes shops, jewelry stores, seed stores, jeep stands, bus stops, timber stores, tea stalls, soft-drink shops and cell-phone stores.

I searched for a fieldwork village while conducting district level fieldwork, obtaining a list of panchayats implementing watershed development from Gramin Vikas Trust. I looked for a village that was at a middling distance from the district headquarter. My aim was to control for villages that were too close to the district headquarter and might have had a development advantage because of their proximity to markets and government offices, and for villages that were too far and might not have all activities implemented due to logistical obstacles. Three blocks met my distance criteria- Limkheda, Jhalod and Garbada. I had conducted pre-dissertation fieldwork in Limkheda and Garbada blocks and zeroed in on these two blocks. None of the communities in Garbada that I had conducted previous fieldwork with were implementing watershed development while one community in Limkheda was, and I decided to undertake fieldwork there, in Mahipura village.

Local government officials and development professionals consider Limkheda, the block where I did block-level fieldwork an oasis of civilization in a 'backward' district because of its flatter topography and villages that are well-connected to roads and market towns. The Lead NGO's project director told me that Mahipura was a good

choice for fieldwork because unlike some villages whose sarpanches had close ties to the BJP or Congress and refused to heed to the District Rural Development Agency, Mahipura had implemented watershed development largely in line with the rules. I traveled to Mahipura and met the sarpanch, an old acquaintance from my previous visits to the village, and requested to be allowed to study watershed development in the village. The sarpanch agreed to my extended presence in the village and I started village trips in November 2006. I moved to Mahipura for good in January 2007 and set up abode with the sarpanch's second cousin's family.

Mahipura lies in a valley surrounded by hills on three sides. The village has a population of 823 persons. Mahipura is a part of a three-village panchayat comprising Mahipura and its neighboring villages Limdi and Himmatpur connected to one another by roads and broad tracks. The village is connected to the market towns of Piplod and Randhikpur by a smooth road on which auto rickshaws, jeeps and buses ply several times a day. Proximity to the road has spawned entrepreneurial villagers' tobacco stalls, cycle repair shops, grocery stores, stationery stores and a pay phone service.

Familiarity with Dahod and Mahipura was beneficial for my research. I already had a level of familiarity with district-level government agencies, NGOs, land and well ownership systems and rules governing natural resources. People remembered me from my earlier roles as a researcher and accepted my presence in the village. There were no undue expectations about any benefits from the study because I had made it clear that I was there purely for research, and the benefits of the study would be in terms of informing policy-making and not any tangible resources.

Dissertation fieldwork in Mahipura was different from my earlier spells of

fieldwork, each of which had lasted no more than a week. While I had stayed as a guest of the sarpanch during my previous visits, I needed to set up an independent abode for long-term fieldwork because much of my research dealt with the panchayat. I had rather naively imagined that I could live with a different family in the village every week, but this was unacceptable to everybody in Mahipura because this made me a transient being and allowed me to avoid establishing roots with any family.

I lived in the sarpanch's house during my first week out of deference to his authority. I stayed with another family for a week and was subsequently invited by the sarpanch's second cousin's wife Saroda to stay at her house. Saroda was the single head of her household for most of the year because her husband migrated to Surat as a skilled laborer in the construction industry. I would be company for her and her three children aged 8, 10 and 12, the oldest two of who studied at a local boarding school, a common practice among well-to-do Kolis.

Saroda's home was conducive for fieldwork because of its proximity to powerful actors while remaining in the 'outer circle' of Chauhans, Mahipura's most powerful lineage and the one that the sarpanch belonged to. That I would continue to stay with the Chauhans even if not at the sarpanch's own house also preserved the sarpanch's authority and allowed him to continue to act as my formal host. Saroda's house was ideally located near the village's main street and the road which enabled me to reach the village quickly from my trips to Dahod and leave late in the evening on days when I had to travel to the district headquarter. Saroda also became a friend, drawing me into the extended networks of her family and friends which provided welcome sociality during my stay in the village.



Figure 3 Location of Limkheda Block in Dahod

Both qualitative and quantitative methods were used to elicit data. I gathered documentary evidence from newsletters, notices, leaflets, pamphlets, files, circulars and reports; narratives from interviews, oral histories and public speeches; and participant observation of consultative processes, conferences, public hearings, tribunals, summits, village assemblies and group meetings, which enabled cross-checking information, corroborating evidence from one source with evidence from another and filling gaps.

Participant observation. Participant observation was a continuous part of the study. Participant observation involves obtaining knowledge not simply from what people said they do in interviews or surveys, but what they actually do in their interactions with other actors (Miller, 1997). Participant observation was also a preliminary strategy to build further lines of inquiry and questions for interviews and surveys.

Archival research. Archival research enabled extending the ethnographic eye to the past and was used to gather evidence on recent events including policy shifts in watershed development and the neoliberalization of the state, and state-society relations in eastern Gujarat and the history of statemaking in Dahod and Panchmahal.

In-depth interviews. In-depth interviews were conducted with national-level bureaucrats, district-level bureaucrats, block-level officials and panchayat secretaries (the lowest-level government employees who collect village taxes and maintain land records), representatives of development NGOs and researchers in Gujarat, key informants, political actors at the district, block and village levels; development subjects, and economic actors in Dahod.

Household surveys. Household surveys were conducted close to the end of my village stay when I knew enough about village institutions, actors and livelihoods to ask detailed and unambiguous questions using accurate terminology. Methods are described in detail below.

Participant Observation

From August-October 2006, I undertook participant observation of the District Rural Development Agency's meetings with Dahod's seven blocks' block-level watershed development teams' agricultural extension experts, social development experts and civil engineers. The last cohort of NGO-implemented projects was implemented from 2002 to 2007. The District Rural Development Agency held joint meetings with NGOs implementing the last NGO-led watershed development projects and contractually hired staff implementing Hariyali.

To understand the shift in Hariyali's administrative techniques, I used a schedule to note bureaucrats' department and agenda-setting at these meetings and differences in the breadth of NGOs' staff and contracted staff's tasks and capacity to alter implementation rules. I recorded the proceedings of these meetings, recording their structure, content, which actors initiated changes in themes of discussions, and how bureaucrats responded to NGO staff and contractual staff. Joint meetings manifested contracted staff's work burdens and constraints on decision-making when juxtaposed with NGOs' autonomy in decision-making.

From 1st to 15th September 2006, I observed the Limkheda watershed development team's activities at its block office located on the premises of Limkheda Block Development Office, and observed villagers' attempts to access information on

government schemes, the Block Development Officer's work routine, and sarpanches' interactions with administrators, accountants and peons, paying attention to the negotiation of relations of power in these bureaucratic settings. I noted the frequency with which people visited the block level office to seek information on watershed development, seek clarification on guidelines, or demand specific inputs, and noted the outcomes of their interactions with the watershed development team.

In December 2006, I observed village panchayat elections in Limkheda, Jhalod, Fatehpura and Devgadhi Baria blocks as part of an independent election observation team, focusing on the process of filing nominations and panchayat and ward-member candidates' electoral strategies at tea stalls, photocopying shops and bus stands. I observed the state's procedures to organize and manage polling for the lowest level elected bodies in India, social norms regarding the polling process, voter turnout, activities around polling booths, candidates' activities near booths to measure voter turnout and estimate vote counts, disputes over electoral conduct, candidates' attempts to mobilize the state for re-polling in case of booth-capturing, and bureaucrats' response to electoral wrongdoings.

Observation of elections helped develop insight into the stakes involved for candidates and voters in village panchayat elections, the sophistication of village panchayat election strategies, the highly charged nature of elections to these lowest-level democratic bodies, and all peoples'- voters' and candidates' alike- deep familiarity with the rules and practices of liberal procedural democracy.

I observed Chief Minister Narendra Modi's public addresses in Dahod to gain insight into the universe of development through electoral politics. Public speeches are a

statement of authority, have elements of performance and are put to work in cultural ways (Handelman, 1990). I treated election speeches as texts which are not only a vehicle of discourse but ‘active agents’ (Prior, 2008) sent out into the world in an election year to arouse sentiments of awe, materialize development via discourse, and reach out to significant constituencies by naming them in development contexts. I observed the pageantry of Modi’s arrival at speech venues, recorded and transcribed all leaders’ speeches, and noted audience response to speeches while traveling back from rallies and through follow-up interviews in Mahipura and neighboring villages.

Intermittently from November 2006 to July 2007 in Mahipura, I observed visitors at the panchayat office, noted the absence and presence of the panchayat secretary, the duration of his stay at the office during each visit, visitors’ waiting time and the panchayat secretary’s responsiveness to them. I observed the extent of the sarpanch’s presence at the panchayat office and the extent to which meetings between the panchayat secretary and the sarpanch were held at the panchayat office and at non-public venues such as the sarpanch’s house. Participant observation in Mahipura was also used to develop indicators of wealth, livelihoods, political participation and village governance for household surveys.

I conducted fieldwork on the macro-context of watershed development’s policy shift in New Delhi. I observed the India Rural Business Summit, 8-9 October 2007 at the Federation of Indian Chambers of Commerce and Industry (FICCI) Auditorium in New Delhi, the Sixth South Asian Association for Regional Cooperation Conference on Gender Reforms at Vigyaan Bhavan, New Delhi in January 2008, and the Independent People’s Tribunal on the World Bank Group in India at Jawaharlal Nehru University,

New Delhi from 21-24 September 2007 to gain insight into economic reforms from a market perspective, state perspective and critical perspective respectively. At the India Rural Business Summit, I observed discussion panels and information sessions on rural banking, corporate rural investment, the rural consumer market, global financial institutions' priority areas for rural investments and the role envisaged by the Ministry of Panchayati Raj for village panchayats in facilitating land and natural resource acquisition for market expansion in rural areas.

At the Independent People's Tribunal on the World Bank Group in India, I noted evidence submitted by academics, think tanks, NGOs, activists and social movements on market-driven reforms, focusing on sessions on seed technologies, regulatory mechanisms, water policy, climate change, agriculture, food security, fiscal policy and environmental policy. At the Sixth South Asian Association for Regional Cooperation Conference on Gender Reforms I recorded the President of India's articulation of women as economically productive actors rather than simply as reproductive actors- the focus of earlier gender policies, noting the entry of economic growth as a national goal for which women's empowerment was now constructed as a new instrument.

Analyzing Texts

Government documents were a major data source which I treated as 'schemes of organization' (Prior, 2008) that tied together themes of citizenship, globalization, economic reforms, monetization and corporatization, themes that were more 'diffused, dissipated and obscured in the everyday' (Handelman, 1990). I accessed the Prime Minister's Independence Day public addresses in 2006, 2007 and 2008, and his speeches to the National Development Council in 2006 and 2007 from the Prime Minister's

official website. The Independence Day address is an important form of evoking the ‘imagined community’ (Anderson, 1983) and it orders citizens, activities, and national visions for the future, giving insight into the transformation of state-society relations.

I also scanned newspaper reports which were an excellent data source on economic reforms because they are a single platform with information on national agencies’ priorities, global institutions’ prescriptions, civil society’s opinion and reports on policy impacts from different parts of the country. Newspaper reports were analyzed from September 2007 to January 2008 for 24 leading English and Hindi news dailies published from Delhi, Mumbai (Bombay), Kolkata (Calcutta), Chennai (Madras), Bengaluru (Bangalore), Jaipur, Lucknow and Amritsar; representing five major regions of the country. English dailies include the Indian Express, Hindustan Times, The Hindu, The Times of India, Daily News Analysis, Deccan Herald, The Telegraph, The Tribune, Financial Express, Economic Times, Business Line, The Statesman, Pioneer and The Asian Age. Hindi dailies include *Amar Ujala*, *Jansatta*, *Rajasthan Patrika*, *Punjab Kesri*, *Hindi Hindustan*, *Rashtriya Sahara* and *Dainik Jaagran*. Articles, reports and commentaries in the weekly news magazines India Today, Outlook and Frontline which covered the spectrum from corporate to critical perspectives were read and notes made.

In each newspaper, I searched for and read articles on agricultural policy, land reforms, environment policy, irrigation, fiscal reforms, development policy, food policy, rural poverty, infrastructure, agro-food reforms and trade policies. I read each article to check for its relevance to my research, cut the relevant article, pasted it on a blank sheet, scanned it as a PDF file, re-read it and made notes. Newspaper articles generally followed

a thread wherein related articles on a topic appeared sequentially, facilitating comprehensive insight into an issue.

Watershed development guidelines, circulars, letters, notices and technical reports gathered in New Delhi, Godhra and Dahod were analyzed to document state actors' creation of new social and economic categories in the drylands. Policy texts were treated as a representation of social reality (Cosgrove & Daniels, 1988) that shifted from framing the drylands as 'erodible' to articulating them as 'water-scarce'. Documents are as revealing by what they highlight as by what they are silent on and create social reality by framing the problem of poverty in the drylands in specific ways. Drawing upon the notion of ideology as that schema of relations which ensures that only certain questions are asked and solutions are sought from a given range of alternatives, and that some questions are never asked and some alternatives never considered even if they are available in principle (Althusser & Balibar, 1965), I read watershed texts through an interpretive lens, reading in capital-intensification, irrigation-intensification and commodity production the preclusion of labor-centric strategies, water conservation and food security. Utilizing policy texts, press briefings and concept notes, I also constructed a timeline of shifts in watershed development's technologies and activities from the 1990s to the 2000s.

Apart from macro-institutional and policy-related government documents, documents gathered from civil society were an important source of information on panchayat leaders' decision-making environments and constraints, panchayat elections and watershed development's technological shifts. Civil society documents include *Mahila Swaraj Abhiyan's* monthly newsletters for women panchayat leaders titled

‘Panchayat Saheli’ (A Friend of the Panchayat), Sadguru’s training manuals for micro-credit groups, Utthan and Prakruti Foundation’s annual reports, and Unnati and Ahmedabad Social Action Group’s booklets on panchayats. I analyzed the Mahipura village files of the National Tree Growers’ Cooperative Federation Limited which facilitated the formation of a village tree growers’ cooperative in Mahipura, conflict over which shaped panchayat elections and watershed development from 2004 to 2006.

Secondary evidence on cash-milk production, watershed development’s core cash-crop activity include the Bank of India’s reports on the efficacy of livestock-loans to the poorest households, the web pages of National Dairy Development Board- the apex agency of the cooperative dairy sector in India, the World Bank’s report on its loan to the National Dairy Development Board for the second phase of the white revolution, academic research on price-setting in the cooperative dairy sector in Gujarat and Panchmahal District Cooperative Milk Producers’ Union Limited’s annual report. Research at the Nehru Memorial Library focused on the history of cooperative credit, irrigation and milk production in Gujarat and relationships between technocrats and bureaucrats in milk societies.

Village level documents were a critical source of insight into the conduct of the state in the locality and partnerships between the state and grassroots political society to enact the state’s visions of social change. Village level documents include village watershed development files, vouchers and muster sheets (sheets listing the names of wage-laborers, the number of days worked, the wage rate for their task, total wages earned and their signatures), self help groups’ registers, groups’ meetings’ minutes, attendance records, affidavits of activities undertaken and payments received. Panchayat

documents analyzed included the Himmatpur-Mahipura-Limdi panchayat committee's meetings' minutes (N=50) for the period 2001-2006 and Mahipura and Himmatpur's village assemblies' meetings minutes from October 2001-February 2007 (N=28).

An analytical reading of panchayat council and village assembly proceedings enabled identifying the scope of these public meetings, which issues were included in the panchayat's agenda for discussion and which were excluded, how development subjects presented their demands, negotiation within the panchayat, negotiation between the panchayat and the panchayat secretary, and disagreements between the assembly and the panchayat secretary.

While watershed development channeled the largest development resources to Mahipura from 2003-2007 and involved distributional decisions on dams, farm ponds, seed kits, micro-credit groups, committee formation and afforestation; the intervention was mentioned only once in village assembly minutes, when the sarpanch announced that Mahipura had been selected for watershed development implementation. To understand distributional decisions regarding watershed development, I consulted Mahipura's watershed development files which were maintained separately from panchayat documents. These files and panchayat documents were used to identify development beneficiaries to pursue interviews with.

In-depth Interviews

Interviews were conducted with ward members, lineage leaders, the sarpanch, village elders, vote brokers, dissident voters, micro-credit groups' leaders and members, milk society committee members, milk-sellers, long-term migrants, subsistence producers, cash-crop farmers, surplus producers, shopkeepers, researchers, NGO

representatives, national bureaucrats, district bureaucrats, peasant intellectuals, district-level politicians, bank managers and dairy technocrats. The interview schedules are in Appendices B, C and D. Most of these interviews were recorded and transcribed, and where this was not possible, I took notes during the interview and wrote up a detailed account on the same day.

Repeated interviews were conducted with Mahipura panchayat's sarpanch in 2006 and sarpanch-elect in 2007 on distributional decisions in watershed development.

Interviews with current and past ward members (N=4) focused on how they mobilized development from the panchayat and influenced the sarpanch. Interviews with patels and lineage leaders (N=10) focused on how they came to be regarded as lineage leaders, what they meant by justice; and how they resolved disputes, punished offenders, enforced sanctions, negotiated differences among themselves and oversaw the sarpanch. In-depth interviews with lineage leaders, patels and ward members lent insight into both the constraints they imposed on the sarpanch and the limits to their power. Interviews were also conducted with vote-brokers, development agents, cash-crop farmers and religious leaders.

Interviews with older key informants shed light on the colonial Baria state's rule. Interviews were conducted with some of the poorest families to understand how they secured development and basic services from the sarpanch and their voting patterns in the panchayat election when it was imperative that they continue to be delivered services irrespective of who won the election. I interviewed disenchanting voters and dissident voters identified through key informant interviews with the sarpanch and his supporters. Questions to dissident voters focused on their vote mobilization strategies, patronage

from their chosen candidate, and engagement with the panchayat for developmental resources in the post-election scenario.

Interviews with self-help groups' leaders (N=8) focused on how they met the transaction costs of micro-credit, disciplined errant borrowers, maintained group records and individual members' passbooks, communicated with the sarpanch to ensure his cooperation in delivering credit, secured the social development expert's assistance in book-keeping, and groups' informal rules on meetings and traveling to the bank to deposit monies. Interviews with market actors included the manager of the Bank of Bandibar which delivered micro-credit in Limkheda, technocrats and managers of the Panchmahal Milk Producers' Union and the Limkheda watershed development team.

Fieldwork focusing on civil society actors included participant observation of a civil society-led social audit of the National Rural Employment Guarantee Act led by *Mazdoor Kisan Shakti Sangathan* (Laborers' and Peasants' Union Collective) in Banswara district; and interviews with technocratic, environmental, feminist, local self-governance and rights-based NGOs in Gujarat including Anandi, Mahila Swaraj Abhiyan, Sadguru and Prakruti Foundation in Dahod; Utthan, Unnati, Ahmedabad Social Action Group, Mahila Swaraj Abhiyan (Ahmedabad and Dahod staff) and Development Support Center in Ahmedabad; and Mahatma Gandhi Pratishthan in Panchmahal. All data was entered in NVivo which enables analyzing, managing and aggregating qualitative data.

Archival Research

Archival research on colonial and postcolonial state institutions enabled exploring continuity and change in statemaking, and was conducted at the National Archives and

Nehru Memorial Library in Delhi, at the Nehru Memorial Library; and the libraries of the International Institute for Population Sciences (Mumbai), Tata Institute of Social Sciences (Mumbai), Gujarat Vidyapeeth (Ahmedabad) and Washington University (St. Louis). Archival documents consulted are listed in Appendix E.

Research at the National Archives of India, New Delhi lasted for six weeks in September-October 2006. I traced settlement and agricultural production patterns and colonial statemaking in eastern Gujarat, focusing on the colonial state's reports on settlement, agriculture, irrigation, public works, soil improvement, tax and forests in semi-arid central and western India. I examined documents from 1857 onwards because colonial rule in India became deeper and more coherent after the rebellion of 1857, a moment when British power was seriously challenged, after which a set of detailed and better-enforced laws for the governance of India were enacted.

At the National Archives of India, I first scanned maps of eastern Gujarat from 1857 to 1947 with the help of the archives' map specialists to identify princely states and British territories which corresponded to the area covered by present-day Dahod district. The British-controlled Bombay Presidency and the princely states of Rajputana, Bhopal, Rewa Kantha, Baroda, Idar, Sunth and Baria exercised control over territories in contemporary Dahod. I placed requests with Archives staff for the complete files of the princely states and the settlement and taxation files for the Bombay Presidency whose extensive records were categorized into distinct sub-headings such as 'police files', 'political files', 'settlement files' and so on. At the National Archives I also accessed the postcolonial state's Irrigation Department's reports until the 1970s.

I read and made notes from the settlement, taxation, credit, land improvement and crop production records. Correspondence between higher- and lower-level officials on problems in implementing policy, exchange of information, and reports of the success or failures of state actions indicated what kinds of policies regarding agriculture, irrigation, crop production and social transformation were being implemented, with what intentions, and with what response from colonial subjects. Government actors' correspondence lent insight into settlement patterns, continuity in state preoccupation with increasing agricultural productivity in rainfed areas, and the construction of the drylands as erodible, as well as periodic campaigns to increase crop production by bringing more land under cultivation, improving credit institutions, extending subsidies and expanding irrigation, echoing contemporary strategies in watershed development.

I conducted archival research at the Nehru Memorial Library in New Delhi from 30 November 2007 to 17 January 2008 to examine the All India Congress Committee's files because it was the governing body of the Congress party and its most powerful organ, and the site where major ideological disputes within the Congress were carried out, business leaders petitioned for tax and cess concessions, and where the contours of a postcolonial development strategy took form.

The All India Congress Committee microfilm rolls examined include 8607, 8634, 8635, 8648, 8681 and 8685, which focused on the rise of the Kisan Sabha (Peasant Assembly) of the Congress Party from 1928-1945 and the opening of a window of opportunity for a pro-poor and labor-intensive development strategy. Additionally, correspondence to the All India Congress Committee by private enterprises after its victory in the 1937 provincial legislative elections, and documents of the National

Development Council established by the Congress to frame postcolonial development policy were analyzed. While the Bharatiya Janata Party is known as India's explicitly pro-business political party (Shah, 2002a), many of watershed development's capital-intensive changes were implemented during the Congress government's rule from 2004 to the present. This called for re-examining the common-sense understanding of the Congress as a populist and even pro-poor political party.

Analysis of the records of the 'All India Congress Committee' at the Nehru Memorial Library, New Delhi, the central governing body of the Congress Party during the 1930s and 1940s, two critical decades before independence when the Congress emerged as the most powerful party in India revealed that the Congress was an umbrella of diverse political ideologies from the left to right spectrum. The Congress contained a stable pro-capital, pro-landlord and private enterprise-oriented base. Analytical reading of the All India Congress Committee's files revealed that business, urban and professional interests were well-represented in the party at the turn of the 20th century, and the party had a strong pro-business wing in late colonial India.

Household Surveys

Household surveys were administered from 1st May 2007 to 31st July 2007. The survey instrument is included in Appendix A. A list of all the households in the village was built from Mahipura's voters' list obtained from the Limkheda Mamlatdar's (Tax Collector's) Office. A household was defined as that entity which had a common kitchen. The instrument was developed using Krishna's (2002) and Lesorogol's (2002) surveys in western India and Kenya respectively which provided comparable rural and semi-arid contexts for developing household surveys. Lesorogol's (2002) questionnaire was used to

develop questions on income and wealth in semi-arid contexts marked by livestock dependence, hybrid subsistence- and cash crop-cultivation strategies, market participation and wage labor migration, and Krishna's (2002) surveys were used to develop questions on political capital, social norms, household participation in village institutions including the panchayat, development agency and relationship with the panchayat secretary.

The survey instrument was pilot-tested in April 2007 to check the appropriateness of wording, flow and respondent burden, which was approximately two hours. Surveys were administered to the head(s) of each household. 122 out of 124 households in Mahipura participated in the survey, with one head of household refusing to participate and the adults in another being away from the village, resulting in a response rate of 98.38 per cent. Well-ownership, irrigation motor rights and livestock-holdings were the main variables to measure wealth, the most important form of power. The measurement of wealth indicators is described below.

Well ownership. Well ownership was measured in terms of irrigation rights to wells. Wells are inherited jointly with land and shared by kin who pool funds to meet well deepening and repair costs. Sole ownership of a well was assigned a property right of 1, joint ownership .5, one-third .33, and so on. A perennial well enabling three or more cropping seasons was weighted 1, a winter well enabling two cropping seasons was weighted .66, and a monsoon well holding water only in the rainy season was weighted 0.16 because it did not enable irrigation. A household with half a share in a perennial well and one-third share in a winter well held .7 well rights ($1 \cdot .5 + .66 \cdot .3$).

Irrigation motors. Irrigation requires the conjunctive use of wells and motors which pump water to fields through rubber or PVC pipes. Motor ownership gives control

over the timing of irrigation. After well-deepening, a household makes its first investment in a diesel or electric motor, therefore motor ownership is an important indicator of wealth. Common motor brands are Kirloskar, Fieldmaster and Usha. Motors range from 2 to 5 horsepower. A brand-new diesel motor costs 20,000 rupees while a second-hand diesel motor cost 10,000 rupees and a new electric motor cost 10,000 rupees. Most irrigators prefer diesel motors to electric motors because the former are more powerful and can irrigate a plot in one-fourth the time. This is important because there are competing claimants to dam-water, which places owners of powerful motors at an advantage in surface irrigation. In cases where motors are shared by siblings, buyers prefer a diesel motor with each irrigator purchasing her own diesel to water a plot, while commercial electricity (which is used by electric motors) is charged to a single account-holder who may have to pay for others' use in case they do not contribute to the electric bill each month. A household with exclusive ownership of a diesel or electric motor was allotted full motor rights of '1' while a household sharing a motor with another kin was given .5 rights, and so on.

Livestock. Livestock were assigned weights based on their market prices. The market prices of bulls, cows, calves and goats are 25,000 rupees, 20,000 rupees, 10,000 rupees and 5,000 rupees respectively. Bulls were assigned a weight of 1.25 because of their centrality for plowing, milk cattle a weight of 1, calves a weight of .5 and goats a weight of .25. The total number of each livestock type was multiplied by its weight and this figure was added across livestock types to measure overall livestock wealth.

Per capita livestock was measured by dividing each household's livestock by the number of household members using the adult equivalent scale which is often calibrated

based on nutritional requirements for individuals by age and gender. I used the adult equivalent scale described by Deaton and Muellbauer (1980) which assigns a weight of 0.2 to children aged 0-6, 0.3 to those aged 7-12, 0.5 to those age 13-18 and 1.0 to those aged 18 and over. This formula was used to convert the number of individuals in the household to the adult equivalent by multiplying the total members in each age category by the category's weight, and adding the figures across age groups. This figure was used to divide household livestock to obtain per capita values. Data was entered in SPSS Version 17.0 and univariate and bivariate analysis was conducted in SAS Version 9.1 due to my greater familiarity with SAS. There was no missing data.

Household surveys were invaluable in measuring individual actors' and lineages' resource endowments. Household surveys were a preliminary source of information on the identities of those regarded as lineage leaders and dispute mediators. Household surveys enabled me to familiarize myself with all families in Mahipura and allowed everybody to learn about the study and ask questions.

This chapter provided a history of eastern Gujarat and described contemporary social and political institutions in the region, its social groups, and the methods used to answer the questions of the study. The next chapter describes how development policy implementation is shaped by competition between political parties to woo dryland voters by delivering material resources to sarpanches, and the mechanisms through which panchayats are implicated in large-scale democratic politics.

3. Parties, Panchayats and the Political Economy of Development

In this chapter I describe how panchayats are implicated in electoral politics involving national parties, how watershed development in particular and development in general is an instrument of political patronage, and how development in the drylands is shaped by political competition between parties to woo dryland voters.

The Rise of the BJP in Gujarat

With the decline of the Congress' dominance in Indian politics in the late 1980s, the rise of the pro-capital BJP and the party's uninterrupted rule in Gujarat since 1998, Gujarat has become symbolic of both neoliberal success and the political success of Hindu nationalism. Gujarat is regarded as the laboratory of Hindutva or Hindu nationalist ideology based on the construction of India as a Hindu nation.

Despite successive losses in national assembly elections in 2004 and 2009, the BJP has ruled in Gujarat continuously since 1995. The BJP's success in Gujarat lies in its breaking the Congress's KHAM alliance comprising Kolis, Harijans (Dalits), Adivasis and Muslims (Singh, 2002) and building a pan-Hindu alliance of upper- and middle-caste Hindus, Adivasis, Dalits and Kolis (Shah, 2002a). Gujarat's share of Adivasis is 15 per cent, well above the national average of 8.08 per cent (Shah et al., 1998), and Kolis are the state's largest caste cluster, comprising 24 per cent of the state's population (Shah, 2002a), therefore Kolis and Adivasis are significant electoral constituencies. Kolis, who are listed as 'Backward Classes' in the Indian constitution due to exploitation rooted in caste (GOG, 1976; GOI, 1980), Dalits and Adivasis together comprise 61 per cent of Gujarat's population (Shah, 2002a), making these voters the largest electorate in the state.

The BJP is a part of the Sangh Parivar ('Family of Organizations') which includes, apart from the BJP, civil society organizations including the Rashtriya Swayamsevak Sangh (RSS) (National Volunteer Corps), the Vishwa Hindu Parishad (VHP) (World Hindu Congress) and the Bajrang Dal, all grounded in the ideology of Hindu majoritarianism.

The RSS, VHP and Bajrang Dal have been instrumental in mobilizing Kolis and Adivasis in tribal districts to vote for the BJP since the 1990s. In Dahod, the RSS's tactics have comprised giving state-wide travel opportunities to Kolis and Adivasis to participate in the BJP's political activities, distributing t-shirts, granting youth local organizational positions, building temples, conducting health camps (see Thachil, 2009 for central Indian evidence), and carrying out hate speech against Muslims, particularly Vohra Muslim traders, moneylenders and shopkeepers in Dahod to whom many Bhils and Kolis are indebted. The BJP-ruled government's tourism ministry has funded the re-writing of Dahod's history in a form heavily tinged with anti-Muslim allusions (see Singh & Maharaol, 2006) that constitute a rewriting of Rajput, Muslim and Adivasi rule into a binary opposition between Hinduism and Islam. In Dahod, Bhil youth, the section most targeted by the Sangh's activists in dryland western India, newly identify themselves not as 'Bhil' or 'Adivasi' but as 'Hindu Bhil', fusing the historically antagonistic categories of Hindu and Adivasi.

While the BJP's activism has led to Kolis and Adivasis in the drylands shifting their allegiance from the Congress to the BJP in significant numbers throughout the 1990s, the party is still regarded as more anti-poor than the Congress by subaltern voters (Shah, 2002a). Therefore just before state assembly elections, the RSS, VHP and Bajrang

Dal perpetrate violence against religious minorities citing missionary proselytization of Adivasis or Muslim terrorist threat to polarize the electorate. In 2002, just months before the state assembly election in Gujarat, the Sangh Parivar unleashed violence against Muslims across Gujarat in the worst episode of communal violence in postcolonial India which lasted for 28 days. The BJP-ruled administration is widely considered complicit in the violence involving the burning of shops and homes, looting, rape and killing, through its inaction to restore law and order and actively aiding rioters (HRW, 2002), and Dahod was one of the worst affected districts due to its proximity to Godhra, the epicenter of the violence.

Riots are localized and shaped by local calculations of acquiring political control (Berenschot, 2011), controlling economic resources (Pandey, 2001) and settling scores in interpersonal disputes (Das, 2007). Violence in Dahod was targeted at Muslim traders, shopkeepers, business owners and moneylenders by middle- and upper-caste Hindu traders to acquire monopoly over the local private transportation business in Dahod, and by selective attacks on Vohra moneylenders by Kolis and Adivasis while sparing Vania (Hindu) moneylenders.

Tenuousness of Support for the BJP in Dahod

The BJP won the 2002 state election on the basis of a highly polarized electorate but the riots eroded the BJP's popularity in Dahod because of the damage of violence on all social groups given Kolis' and Adivasis' long-term economic relations with their Vohra moneylenders, the escalation of violence against all women during the riot, Kolis' and Adivasis' experience of upper- and middle caste perpetrators of violence getting off scot-free while Adivasis and Kolis were punished disproportionately, and migrant

workers being forced to flee their urban worksites in the riots and return to their villages with life and limb barely intact, losing a season's wages.

Adivasis' and Kolis' ambivalence to Hindu nationalism stems from the intermingled pasts and presents of Muslims, Dalits, Adivasis, Kolis and Rajputs who share similar histories and subjectivities of economic marginalization, discrimination, similar livelihoods and non-vegetarianism. For instance, the Tadvi Bhils of western India are descendants of Muslim soldiers who mated with Bhil women. During Aurangzeb's rule (1658-1707), Bhils converted to Islam in large numbers and Muslim Bhils and Hinduized Bhils live side by side. Muslims in Dahod continue to be regarded simply as a different *jati* and are called Ghanchi which translates into a lineage or occupational category. Syncretic worship is common across Gujarat's drylands that mesh animism, Hinduism, Islam and Sufism (Roy Burman, 2005). Kolis and Adivasis continue to name their children with not only Hindu but also Muslim names which upper- and middle-caste Hindus would consider transgressive. With regard to how he sees Muslims in Dahod, Ramabhai, a Koli peasant intellectual succinctly said:

The citizens of the state (*praja*) are one. They comprise different castes- Ghanchi, Koli, Adivasi, *Vaghri* (Dalit) and so on, but they are the same *citizenry*. They have to be treated the same. ... The state is formed by the people, but the people are created by God.

Neoliberal Development during the BJP's Rule

BJP rule in Gujarat is led by Chief Minister Narendra Modi who is considered complicit in the 2002 violence has been instrumental in the BJP's successive wins in Gujarat. Gujarat has emerged as the poster-state of market reforms in India under

Narendra Modi, who has been proactive in attracting private investment and facilitating land acquisition for industrial parks in the state. Since 2002, Narendra Modi has attempted to demonstrate good governance and the protection of private property in Gujarat in order to compensate for his alleged complicity in the 2002 riots, in order to attract private investment in the state.

In 2003, Modi initiated the Vibrant Gujarat campaign, an annual investment festival to attract private investment to the state, and invited the Tata Corporation to build its Nano manufacturing plant in Gujarat when the company faced obstacles to land acquisition for its plant in Singur, West Bengal in 2008. Consequently, Gujarat has been celebrated by a significant section of the middle- and upper-classes, the Indian diaspora, and Indian and global corporations for its pro-business economic policies, and the Financial Times awarded Gujarat the 'Person (sic) of the Year' award for 2009.

However, deepening inequality in the state remains the BJP's Achilles heel. Neoliberal reforms have been accompanied by deepening inequality in Gujarat, and rural poverty in Gujarat declined by 2.8 per cent from 1993-2005 as against 8.5 per cent for India as a whole, and poverty in Gujarat's tribal areas increased during this period (Hindu, 2009). From 1996 to 2006, Gujarat slipped one rank each in the human development index's education and health indices (Hindu, 2009).

The Political Significance of Dahod for the Congress and BJP

Due to both skewed development and communal violence, Dahod is a battleground for the BJP to restore faith in the electorate and enable Chief Minister Narendra Modi to buttress his large political ambitions, including Prime Ministerial ones by winning over Kolis and Adivasis in the district. Narendra Modi refers to Dahod as the

border of the nation (*sarhad*), which is a frontier metaphor of many kinds, including the frontier of the BJP's rule in Gujarat- turning out to be the district where the BJP won the 2007 assembly election by the smallest margin in the state, the place where the limits of violence were explored in 2002 which produced limits to Modi's ability to stake a claim to higher leadership, and a site of the limit of statemaking in districts from where natural resources are extracted and whose inhabitants lay bare the exercise of power saturating skewed development. While the BJP won the 2002 state assembly election seat in Dahod, its MLA Babubhai Katara was caught in a human trafficking offence in 2006 and lost his seat. Therefore Dahod was up for grabs and the Congress believed it could win the election there by re-fielding its candidate Prabha Taaviad, who Katara had won against the by a hairline margin in 2002.

Why Development Patronage to Panchayat Representatives

Following the decline of the Congress party's hegemony and the rise in power of regional political parties in the 1980s, both the Congress and the BJP, India's largest parties have been able to form central governments only through coalitions with powerful regional parties. The enactment of Panchayati Raj Institutions at the village, block and district levels reflects national parties' attempts to regain control over electoral politics relative to regional parties by channeling resources directly to panchayats (Gupta & Sivaramakrishnan, 2011).

Liberalization in the 1990s has led to the devolution of public works and service delivery to contractors, leading to the rise of a new economic class in semi-arid districts which has diversified occupationally from cash-crop agriculture to contracting and is closely involved in local politics. Contractors have close affiliation with the BJP and

Congress and secure state-government and central-government contracts for building public infrastructure through ties with parties' leaders, and in turn channel votes to the party. Contractors are a new set of political leaders who build alliances with sarpanches in panchayat elections. The same person may bear the identity of both contractor and sarpanch, because contracting generates the wealth to contest panchayat elections and sarpanches in turn using their familiarity with government agencies to diversify into contracting. The BJP has wooed voters in the drylands not only through direct engagement with voters but also by building critical links with contractors and sarpanches. Watershed development may be more intensely implemented in Gujarat than other states as a form of patronage by the Congress to sarpanches in Gujarat to wean them from the BJP, whom it cannot influence through grassroots mobilization given its weaker local cadres.

Dahod's political leaders including sarpanches, block panchayat representatives, district panchayat representatives, patels and ward members are affiliated with both the Congress and BJP, and affiliations are not set in stone but open-ended to take advantage of a constantly changing political landscape, because rural areas experience intense voter mobilization for a major election every year- of either the village panchayat or block panchayat (block level local self-governance body comprising a president and members, with the president elected by the entire electorate of a block and members elected from block-level wards) or district panchayat (district level local self-governance body comprising a president and members, with the president elected by the entire electorate of a district and members elected from district-level wards) or state assembly or national assembly, each of which has a five-year term. Leaders use political parties to advance

their careers and often switch party affiliation, therefore political parties use development to woo *all* local leaders irrespective of whether they are expressly aligned with a particular party or not.

Development schemes are announced at village assemblies and voters are familiar with them. Schemes' names signal the name of the party delivering them- Congress-led schemes bear the prefix 'Mahatma Gandhi' who the party deploys as its founding father, or the prefix 'National' indicating that it is delivered by the central state, leading voters to link the scheme with the Congress which has formed the central government continuously since 2004. The Gujarat government's schemes have Gujarati names so that they can be associated with the party in power in the state which is the BJP. Moreover, under BJP rule, schemes invoke Hindutva, use Sanskritized words based on the ideology of India having a solely Hindu past united by the Sanskrit language, and invoke Hindu religious symbols that exclude both religious minorities and lower castes in their imagination. Examples include the state government's largest schemes, *Gokul Gaam* (Comprehensive Village Development) and *Nirmal Gaam* (Total Sanitation) whose literal translations reference Gokul, the village of the Hindu god Krishna's birth, and upper-caste ideas of caste-pollution and purity.

Development delivery, social service delivery, land allocation, loan waivers, and foodgrain delivery at subsidized prices are major instruments for securing voter support in the drylands. Of these, development delivery, social service delivery and land allocation have been utilized to the greatest extent in tribal Gujarat. Both central-state-delivered and regional-state delivered schemes are channeled to the district, and a region's MP, MLA, and with the enactment of panchayati raj, district panchayat president

and block panchayat president attempt to influence the selection of villages, blocks, and constituencies for delivering services. In return for their village, block or constituency being selected, elected leaders promise the delivery of votes to their parties. Through the specific case of Mahipura's selection for watershed development, I demonstrate how electoral politics shapes the delivery of development.

Village selection for development schemes is shaped by bargaining among MLAs, the MP, district panchayat members and block panchayat members. Tusharsinh Maharaol, a district level Congress leader and ex-district panchayat member explained:

The MLA does influence village selection, and he should influence decision-makers in favor of his constituency- that's what he's got elected for. He's got to be able to say he's done 'this and this and this' when the election comes.

Once a development policy is initiated, the District Development Officer who is the Chief Executive Officer of the District Panchayat informs the local MLA, MP and district panchayat leaders about the intervention at the Panchayat's monthly meeting. Armed with information and undertaking a close reading of the guidelines, district- and block-level panchayat leaders mobilize the District Rural Development Agency to choose villages of electoral significance to them. Vinchhia Bhuria, president of the Limkheda Block panchayat clarified:

Watershed villages are selected by the MLA and we are simply delivered the list by the District Rural Development Agency. We tell the MLA 'this village in our constituency meets watershed development criteria and should be selected', but the MLA makes the final decision. The district panchayat president and members

also try to influence village selection.

The Congress' Campaign and Patronage to Panchayati Raj Leaders

In Dahod, while older leaders like patels have greater affiliation with the Congress because of patronage ties with the party during the KHAM alliance in the 1970s and 1980s, the BJP, a newer party in Gujarat's drylands has opened up political opportunities for younger leaders to vie for panchayat leadership by giving them affiliation with the BJP. Therefore the Congress faces a tough task in wooing voters.

Implemented by NGOs until 2002, watershed development's transfer to panchayats in 2003 has enabled the Congress which controls the central state since 2004 to woo voters through the delivery of development. Delivering watershed development to sarpanches in 216 dryland districts enables the ruling party at the centre build a link with numerically preponderant subaltern voters in remote districts. Watershed development's technological choices fuse with the techniques of patronage politics, channeling machinery, loans, livestock and irrigation to sarpanches who are pre-eminent vote-brokers. Hariyali is thoroughly shaped by the imperatives of democratic politics- in policy formulation which transfers resources from NGOs to panchayats to enable national parties to channel development to sarpanches in exchange for votes, and in village selection which is shaped by district-level bargaining among MLAs, the MP and district panchayat members.

The Congress's election campaign was kicked off by Congress President Sonia Gandhi who addressed a public meeting at Baria town on 21st January 2007, ten months before the Gujarat assembly election, and again at Chhapparwad in November 2007, just weeks before the election. Tusharsinh Maharaol, local Congress leader and one of the

Baria meeting's organizers remarked:

We (Congress leaders in Baria) organized the Baria gathering. We wanted to center it solely on Gujarat's voters so we chose Baria. If we held it at Dahod there would have been people coming from Banswara and Jhabua districts in Rajasthan and MP (Madhya Pradesh). We decided to go deep within the district so that only people from Gujarat came, and more came from Gujarat than neighboring states. We wanted the entire tribal belt of Gujarat to come.

At the meeting, Sonia Gandhi emphasized the Congress's pro-poor credentials by citing the delivery of watershed development and the National Rural Employment Guarantee Act, among other schemes. The Congress's meeting was advertized leanly but effectively through the blue slogan 'Onward to Baria!' (*Chalo Baria!*) painted on whitewashed walls in Dahod. The Congress's meeting was better attended than four public addresses by Narendra Modi in 2007- in January, July, and twice in August, despite the Chief Minister ordering district and block-level bureaucrats to marshal contractors' vehicles to bring villagers to the BJP's meetings. Despite lacking the resources to hire buses, trucks and jeeps to bring audiences to the meeting in a state where it was out of power, the Congress commanded a larger crowd at its meeting at Baria. A senior block-level bureaucrat in Dahod explained why:

Ask about the Congress's work in the tribal belt and people will recognize it. The BJP can't command the same numbers in a district-wide rally even if it calls Atal Behari Vajpayee (senior BJP leader and popular national figure). Sure, the BJP has expanded in the blocks and villages through the RSS and VHP and has had

the chance to win the Block Panchayat and District Panchayat elections in the past 10 years. But at the MLA and MP levels it's still the Congress that has recall for people. As far as higher-level elections go, the hand (the Congress's election symbol) is still the most familiar symbol in rural areas. The government (*sarkaar*) is associated with the Congress, and given a choice between the lotus (the BJP's symbol) and the hand, voters choose the hand.

Not only symbolic recognition of the Congress' election symbol but also an older political alliance with the Congress, and the Congress' clientelism, including via watershed development, shaped Koli-Adivasi voting patterns. The selection of Mahipura, my fieldwork village for watershed development is illustrative of market-driven development unfolding by the calculations of electoral politics and the Congress' use of Hariyali as a tool of clientelism. Mahipura adjoins the forest where Bilkis Bano, a 21 year old Muslim woman's infant and family members were killed by a Hindu mob from her village while fleeing to safety in the aftermath of violence at Godhra in 2002. Bilkis was gang raped and left for dead, survived, filed a police case with the assistance of civil society actors, and after a protracted struggle, became the only riot rape-victim in postcolonial India to secure justice in a riot-rape case.

Mahipura's sarpanch was summoned as a witness in the case conducted in-camera in Mumbai (Bombay). The sarpanch later asserted that while the Koli-Adivasi perpetrators were punished, upper castes were allowed to go scot-free. Seven persons were in fact acquitted in the Bilkis Bano case, including two doctors and five policemen, reinscribing subaltern groups' experience of state discrimination against lower castes and

tribes. A contributing factor for the village's selection for implementation in 2003- the very first year of Hariyali's initiation- was its significance in one of the most widely known crimes of the Gujarat riots.

Village selection was shaped by a locus of politics across district and block levels. While Koli appeasement in the aftermath of communal violence played a critical role in Mahipura's selection, the crafting of the Mahipura watershed was also shaped by bargaining within the Limkheda block panchayat. Limdi, the smallest and therefore numerically weakest village in the Mahipura panchayat was replaced by a discontinuous village Bordi located 12 kilometers away, morphed into the Mahipura watershed by a Limkheda block panchayat representative who was from Bordi. Mahipura and Himmatpur's selection also demonstrated the primacy of already-existing market connections in favoring certain villages' selection because both villages supplied milk to the Panchmahal dairy in Godhra. Despite flouting watershed development's major criteria by being relatively wealthy, having irrigation and being dominated by cultivator castes rather than tribes, Mahipura and Himmatpur were selected due to the existence of a milk society.

This section explored the politics of village selection and the way in which the priorities of capital-intensive development meshed with the goals of electoral politics. In the next section I show how watershed development also influenced the BJP-led state government, leading it to design, advertise and deliver schemes that mimicked watershed development to open alternative channels of political patronage for the 2007 assembly election.

Political Competition in Dahod

While Gujarat has been feted globally as a model of neoliberal success, there is widespread local criticism of deepening inequality under the BJP's rule in Dahod, and support for the BJP is contingent on its delivery of social services. Therefore tribal districts like Dahod have received intense political attention from the BJP, whose leaders have invoked development delivery in tribal districts through rhetoric and discourse in an attempt to bypass the material reality of skewed distribution.

'Seventy per cent voters in a village vote for the BJP but 30 per cent vote for the Congress' was one voter's pithy summary of Congress-BJP voting patterns in Dahod. Ramabhai Chauhan elucidated, 'Some people's minds are tilted in favor of the Congress and some in favor of the BJP. Those who like the BJP will vote for it but those who don't like the BJP will not.' An electoral victory was as uncertain for the BJP as the Congress, and the following section explores the BJP's attempt to deliver development patronage in Dahod.

The BJP's Attempt at and Failure of New Development Patronage

At a public meeting in Limkheda on 10th August 2007, BJP leaders waxed eloquent on the resources channeled to tribal districts during the party's rule, with Randhikpur MLA and Minister of Forests Jaswantsinh Bhabhor enumerating that he spent 12,000 crore rupees on regenerating Dahod's forests, and Narendra Modi asserting, 'In just five years, I have spent 6,200 crore rupees on Gujarat's tribal districts, and... I have resolved to spend 15,000 crore rupees more.'

Parties periodically mobilize poor voters for their public meetings, and poor voters have an intimate familiarity with political discourse. Upon hearing Modi's proclamation, a Koli audience member remarked to another, 'We didn't see any of that money come to the villages, did we?' When my Koli friends and I returned to Mahipura, one said in mock confusion, 'All the money Modi talked about- where did it go?'

In Mahipura, on the morning of leaving for the Chief Minister's 'Save the Girl Child' address, Heeriben, a Koli Chauhan woman remarked, 'We're going to a *nautra* to eat sweetmeats (*laadvva*).' Heeriben used the metaphor of traveling to a bride's family from the groom's family's side which has an upper hand in bride-groom relations, to describe voters' position of power with respect to parties during an election. The *nautra* is a ceremony involving the bride's family serving sweetmeats to the groom's family to erase any slights that might have taken place during the wedding, aptly used to describe political parties' atonement for any ills towards poor voters in the past five years, the offering of development-delivery to erase systematic resource-extraction, and request for votes on the basis of giving voters a free trip to a public meeting venue and serving them snacks there.

In 2006-2007, the state government announced the launch of two unprecedentedly generous schemes- *Sakhi* (Friend), a micro-credit scheme, and *Vanbandhu Kalyan Yojana* (Tribal Welfare Scheme), delivering loan-buffaloes to tribals who constitute 72 per cent of Dahod's population (GOI, 2001). The two interventions together mimic watershed development's most desired material technologies- microcredit and livestock loans. However, after just three months of its introduction, *Vanbandhu Kalyan Yojana* was quietly withdrawn due to lack of funds. But the intervention remained enacted in

discursive practice, with glitzy advertisements strategically erected on Station Road, Dahod's arterial road; such that Dahod town's inhabitants believed that the BJP was doing an outstanding job of rural development. A police superintendent from Godhra involved in security arrangements for the Chief Minister's public addresses in Dahod and Godhra articulated:

It's more important to show that work has been done than to do it. All of Modi's public addresses in the past two years in districts across Gujarat are exercises in creating his persona in the public mind.

My attempt through this case is to show that development and democratic governance are thoroughly inter-twined, in that the delivery of development constitutes the measure of democratic governance at both the local national and beyond. To compensate for lack of actual development delivery such as the withdrawal of the Tribal Welfare Scheme, Narendra Modi used subsequent public meetings to channel cash-patronage directly to sarpanches throughout 2007. At the 'Girl Child Protection' meeting in Limkheda, the BJP-led government delivered 1,700,000 rupees to female students for exemplary performance in the 10th and 12th Board exams and entrepreneurial women's self-help groups for successful market participation; an overwhelming proportion of whom were sarpanches' family members. The Mahipura sarpanch's middle daughter who was close to completing a college degree received an award for excellence in the 12th board exam she passed several years ago.

The BJP delivered patronage in the form of government employment as well in late 2006, announcing the appointment of five 'village friends' (*gram mitra*) in every

village panchayat specializing in agriculture, education, health, development and family welfare at a monthly salary of 1000 rupees each, ‘to disseminate information on the honorable government’s schemes for development in rural areas and to enable the participation of eager youth in the rural community development endeavor’. This is striking in light of the overall rolling back of the state from employment.

Development Patronage Failure and the State’s Proposal of Consensus Panchayats

In the face of fickle local leaders without deep alliances with the BJP, the BJP’s poor development performance, the fallout of violence in Dahod, and competition from the Congress, Narendra Modi announced the *samras* (‘consensus’) scheme in October 2006 to attempt to craft ‘uncontested’ panchayats in village panchayat elections because elections threatened to open up crevices of dissent against the BJP’s illiberal politics and neoliberal policies. Modi called for contestants to abandon elections and cited strains on government coffers that could instead be used for development. Modi called for selecting a candidate by consensus, announcing that he would reward panchayats that decided not to hold elections with a ‘development fund’ of 500,000 rupees. This fund actually consisted of bribes to panchayat contestants to incentivize withdrawal of their nominations.

A BJP MLA’s evocative command to Block Development Officers was ‘Kill or murder, but make them consensual’. District and block level bureaucrats threatened to jail defiant candidates, report intractable candidates to higher level BJP leaders and accused dissenting candidates of being Congress supporters. This was the second time that the Chief Minister had floated the consensus proposal, having proposed the scheme in the 2002 village panchayat elections, just after the 2002 carnage.

Resistance to Consensus Panchayats

In what follows, I attempt to show that development and democracy mutually constitute each other: not only is development a tool of securing political authority as both the Congress and BJP's patronage politics demonstrate, but democracy is also deployed as a tool to secure development. Through an account of deliberation over the Chief Minister's consensus in Mahipura, I show how voters rejected consensus and asserted their right to be able to check leaders' power through elections, secure social services, and shape the trajectory of community development.

The creation of non-elected panchayats contradicts the very objective panchayats have been created for- to increase representatives' accountability through the threat of being voted out of power and having to win an election, which propels broad-based distribution. Consensual politics eliminated the exercise of secret ballot which forced leaders to broaden development beyond their lineage. Panchayat elections have created a politicized understanding of the state among voters. By uniquely constituting representational politics in the locality, panchayats craft a politicized understanding of development and the state among marginalized groups and a deep sense of justice and legitimacy of rule, and voters in Mahipura challenged the selection of a unanimous candidate.

At bureaucrats' behest, every panchayat conducted a village assembly to explore whether voters were agreeable to selecting rather than electing a candidate. I was allowed to observe Mahipura's village assembly which was conducted by the deputy sarpanch. The meeting was attended by the panchayat's seven prospective candidates, their supporters, voters and lineage leaders. At the meeting, voters broadened the meaning of

consensus beyond that intended by the state and asserted that a consensual process needed to turn back to the hamlets to choose unanimous candidates. More radically, voters stated that a different criterion was required to select a unanimous candidate, which would necessarily exclude all those who had set out to win through *opposition* and *contest*. This discourse destabilized the state's very architecture for securing unelected panchayats by narrowing the space of contestation to candidates.

The consensus notion put negotiation under wraps because powerful candidates negotiated for the sarpanch's position among themselves. However, people grasped the possibilities opened by a village assembly on consensus to problematize a political practice of opposition and contest rather than deliberation, challenging the legitimacy of *both* the state and panchayats.

In Mahipura, not only voters but even contestants challenged the consensus proposal, asserting their right to become legitimately elected leaders which was an immense source of power. Panchayat contestants in Dahod challenged consensual politics by circulating the phrase 'consensus if consent, else not'. Contestants revealed a keen intelligence of the cost of an unelected panchayat to their political careers. Contestants responded to consensual politics with the rhetorical question 'Why doesn't Modi implement 'consensus' for his own seat?' challenging the Chief Minister's ethics not from a position of subjecthood but as equal political actors. People's challenge of the Chief Minister's proposal also stemmed from familiarity with parties' vote-buying practices, and Narendra Modi's argument of rising election expenses rang hollow given that both the BJP and Congress gave large sums of money to village leaders for votes. On the eve of the state assembly election in December 2007, Ramabhai Chauhan, elaborated,

‘They corrupt leaders with all the money and leaders corrupt voters. The leaders are greedy.... They give people a few rupees here and there and fill their own pockets.’

Five candidates for the sarpanch’s post attended Mahipura’s village assembly, four from Himmatpur and the incumbent’s husband from Mahipura. Mahipura panchayat’s sarpanch seat was reserved for a woman in 2002, and Mahipura’s long-time contestant Shankar had made his wife Kampa the de jure panchayat candidate, helping her win the election and conducting the panchayat’s business himself. No independent women leaders have emerged in the Mahipura panchayat at either the sarpanch or ward-member level, and this is commonplace, although there is a critical mass of women leaders in Dahod as a whole.

To resolve conflict among contestants in choosing a unanimous candidate in 2006, bureaucrats had suggested that the strongest candidate be chosen as sarpanch, the next strongest as the deputy sarpanch and the rest be made ward-members. Three of the weakest candidates withdrew their nomination. Tersing, 30, the youngest and first-time candidate from Himmatpur had served as the Mahipura de facto incumbent Shankar’s assistant from 2002-2006 on the promise that Shankar would support Tersing’s candidature for sarpanch in 2006. Shankar backtracked on his promise and proclaimed that he would re-contest the election (the seat was no longer reserved for a woman). Tersing asserted that if Shankar contested so would he. The Mahipura village assembly decided against selecting a unanimous candidate, and Shankar and Tersing contested the election.

Only forty-seven villages turned consensual in Dahod, the lowest proportion in any district in Gujarat. Dahod also had the largest extent of re-polling in cases of voter-

intimidation and poll-booth capturing, signifying intense electoral conflict, an autonomous political culture that challenged election verdicts, and the high stakes involved in panchayat elections in the drylands, where democratic politics rather than capitalist production is a source of accumulation, unlike in irrigated districts.

Panchayat leaders exhibit an agency that it denied to them in most accounts of local politics. Formal democracy buttresses panchayat power through electoral politics, majority rule, secret ballot and resources to deliver services. This makes panchayats implicated in the state but precisely through implication, enables voters and leaders to critique the state.

The BJP won the Gujarat election in 2007 by the smallest margin in Dahod, and panchayat leaders were a critical part of its victory. In exchange for development patronage, political parties secure sarpanches' active connivance in every step of an election, from campaigning to controlling polling booths to vote-counting. Bharat, 28, the youngest lineage-leader from Mahipura revealed:

Narendra Modi called a meeting of all the MLAs of the BJP and two lineage leaders from each village. Depending on the polling booth, he called leaders from the respective booths so that two BJP people could be placed at every booth.

DD: So you will be at the polling booth on polling day?

BS: Yes.

DD: Was anyone from the Election Commission present?

BS: No. Block panchayat BJP representatives, district panchayat BJP representatives, village panchayat representatives and lineage leaders.

DD: So this was a party meeting.

BS: Yes.

DD: What was the topic of discussion?

BS: That the BJP must get the votes.

Becoming sarpanch not only gives control over development but also opportunities to build relationships with parties' leaders and deepen political power by campaigning for parties in elections, delivering one's lineage's and village's votes, and assisting parties in 'managing' the polling process, making panchayats deeply contested.

Development Patronage on the Congress' Part

Political competition between the BJP and Congress continued to shape development in Dahod after the state assembly election. The Congress-led central government initiated the Backward Regions Grant Fund (*Rashtriya Sam Vikas Yojana*) in 2007, two years before the general election in 2009, to channelize funds to infrastructurally backward districts inhabited disproportionately by poor voters. The Backward Region Grant Fund delivers resources for building infrastructure across the village, block and district level to bridge critical gaps in development, and its funding criteria are broad so that the central-state can reach out to any constituency of electoral significance with this scheme. The scheme's provisions are generous- if a particular village has been excluded from a certain development activity it can receive funds through this scheme. If the funds for a particular activity are exhausted with a certain department, the Backward Region Grant Fund delivers funds for that activity.

The District Rural Development Agency's director traveled across every block headquarter in Dahod and conducted meetings with sarpanches, panchayat secretaries and Block Development officers to disseminate information on the Backward Region Grant

Fund. Sarpanches were informed that *every* panchayat that applied for the Backward Region Grant Fund would receive at least 300,000 rupees. Six strategic districts were selected for implementation- Banaskantha, Dangs, Panchmahal, Dahod, Narmada and Sabarkantha; all tribal districts inhabited disproportionately by Adivasis and Kolis.

The Backward Region Grant Fund also delivered micro-credit to women, an electoral category of growing importance. Micro-credit was delivered through seven NGOs; each allotted a target of forming 125 self-help groups. Two districts were selected for micro-credit delivery- Dahod and the Dangs, both up for grabs because the Dangs is the poorest district in India and has witnessed intense violence against missionaries by the Sangh in recent years, and in Dahod, BJP MLA Babu Katara recently lost his seat. Precisely like the BJP, the Congress delivered privatized, high-value development technologies such as micro-credit and capital-intensive infrastructure as a form of patronage to hamlet leaders and lineage leaders who control property in their lineage, have patronage ties with kin, and shape kin voting behavior.

In the 2009 national assembly elections, while the BJP won 14 seats in Gujarat, the Congress won a surprisingly large 12 seats. Prabha Kishore Taaviad, the Congress candidate won in Dahod.

Discussion

Development is implicated in democratic politics and is mediated by political competition between national-level parties. Like other development interventions, watershed development is shaped by democratic politics because of panchayats' implication in higher scales of power. While panchayats continue to be considered stand-alone elected bodies in most scholarship on democratic decentralization and their links

with broader processes of statemaking remain understudied, this chapter attempts to fill the gap by teasing out the complex relationships between sarpanches and parties, and sarpanches as conduits of development patronage to numerically dominant poor voters in India by two among the world's largest parties, the Congress and BJP.

Panchayats play a central role in enabling political parties to reach rural voters, and more so in the remote drylands than other rural areas. The panchayat is a greater source of wealth and power in the drylands than in irrigated agrarian districts where the market economy is a bigger source of wealth and the panchayat is subordinate to economic institutions. Panchayats in semi-arid districts are centers of local leaders' and voters' aspirations of development, access to economic resources, control over natural resources, political careers and wealth. Patronage politics meshes well with capital-intensive development including micro-credit, infrastructure-building and watershed development. This produces trickle-down ownership of material resources from sarpanches to ward members, vote brokers, patels, development agents and lineage leaders, and from them to kin and neighbors.

Watershed development unfolds in the realm of local 'self-governance' by three million elected representatives comprising sarpanches and ward members across the world's largest democracy, with panchayati raj constituting the world's largest institutional framework of democratic governance. Watershed development's grassroots implementation by panchayats enables studying how market-driven development shapes and is shaped by democratic decentralization, and what the distributional consequences of such an institutional arrangement of development policy implementation are, which are the themes of the next chapter.

4. Democratic Decentralization, Electoral Politics and Distribution in the Community

The state relies on political actors in society to achieve commodity production and agrarian change (Yang, 1989), and watershed development is implemented by panchayats. I describe the process of bargaining involving the sarpanch, ward members, vote brokers, development agents and lineage leaders to shape the distribution of material technologies and wage employment delivered through watershed development; and the conflicts over natural resources, infrastructure delivery and political inclusion that inflected contestation over control of the panchayat.

Watershed development comprises natural resource management and interventions geared towards private land including dam-building, building farm ponds for in-situ water harvesting, building field bunds and delivering seed-kits to farmers for cash-crop production. In Mahipura, watershed development was implemented from 2003 to 2008 and comprised afforestation of grazing lands, dam-building for surface irrigation, cash-crop demonstrations, building farm ponds, extending micro-credit and undertaking high-value commodity production.

The Village and its Factions

Mahipura lies in Limkheda block in the flatter western part of Dahod district. Mahipura is considered a cultivator village dominated by Kolis where Adivasis are in a minority, unlike the rest of Dahod where Adivasis form half or more of a village's population. Mahipura consists of 105 Koli and 17 Adivasi families. Koli lineages include Chauhan, Baria, Patel and Labda. Adivasis lineages include Taaviad, Nayak and Bhabhor. Kolis have settled on the best quality land, enabling surplus production and

cash earnings to invest in well-deepening. Voters vote largely along lineage lines.

Mahipura's three largest lineages- Chauhans, Barias and Patels control the panchayat.

There are three social actors in the local struggle I describe: the Chauhans; larger sections of Patels and Barias; and a coalition of weaker Barias, less influential Patels and Bhabhors. At stake is development channelled to Mahipura of which watershed development was the largest intervention; the panchayat's provision of infrastructure; and control over the village forest.

Mahipura consists of level fields stretched out until village borders where low hills mark village boundaries on three sides, the fourth boundary being a dry stream bed. One end of the village is against the natural wall of the catchment of the Patangadi dam. Mahipura consists of two sections, the main village and Bordi hamlet, which is nestled against the Patangadi dam's catchment. Bordi gives the appearance of a self-contained village and a broad track separates it from Mahipura. Mahipura has a village forest spread over 67 hectares and its grazing lands are spread over 35 hectares, of which 25 hectares are under the Revenue Department's jurisdiction and 10 hectares under the panchayat. The village adjoins an arterial road of the Gujarat state highway system which has facilitated its large farmers' participation in cash-milk production for the Panchmahal dairy located outside Godhra town 20 kilometers away. Mahipura is connected to the market towns of Piplod and Randhikpur by auto rickshaws, jeeps and buses which ply on the road adjoining the village several times each day. The village received electricity in 2003 and all hamlets except one have household electricity connections.

Cultivation and migration are the mainstays. The soil is generally brown and loamy. Fields are a combination of flat unbunded plots and banded fields with one to

three feet high embankments to conserve water for rice transplantation. Beyond the fields lie fallows to be brought under the plow when claimants on land increase. Fields are unfenced and borders are planted with bamboo and *madhuca indica* (*mahua*) to mark field boundaries, for shade and for fodder. *Mahua* yield a harvest of sticky, sweet and nutritious yellow fruit in spring which is consumed fresh, and dried and sold to shopkeepers at a handsome price for brewing liquor.

Soil fertility varies according to security of tenure (Meinzen-Dick & Gregorio, 2004), proximity to homestead land and wells, and proximity to surface irrigation sources like streams or irrigation tanks (Sengupta, 1993). Cultivators apply more fertilizer to leased land than land they own (Gupta, 1998). Organic manure is applied only to land for subsistence cultivation. People grow local varieties of maize and rice for consumption, and hybrid varieties of rice such as Gujarat 40, Gujarat 80 and Kamod; wheat, vegetables and oilseeds for sale. Perennial well-owners grow summer crops of lentils and cereals which are nutritious food crops with nitrogen-fixing properties and attractive cash crops because of their high prices.

People prefer to consume local varieties of milky-white maize rather than hybrid yellow maize because of local seeds' greater weight, meatiness and pest-resistance in storage. Households with winter- and perennial-wells grow chillis, garlic, cilantro, okra, eggplant, flat beans, bitter gourd and yellow gourd for consumption. Seeds are conserved by allowing some vegetables to over-ripen and develop massive seeds, which are extracted, dried and stored. Seeds are preserved in airtight containers and stored in a cool, dark place. Homestead land has vegetable plots and useful trees like *acacia arabica* (*desi*

bawal) for toothbrushes. Milk is an infrequent food which is a by-product of calving to increase livestock holdings to gift to kin at weddings or the birth of a child.

The proportion of households who purchase commercial seeds for cash-crop production is miniscule even in this cultivator village, largely because of lack of access to a lift-irrigation scheme. Development schemes, subsidies and agriculture fairs (*krushi mahotsav*) are major sources of affordable commercial seeds. While government sources provide subsidized seeds, stores sell market-price seeds of both private companies like Mahyco and government seed research institutes at Godhra, Anand and Dahod.

Thirty five per cent of all households in the village have access to perennial wells, a high proportion for Dahod district. In families without either perennial-wells or winter-wells, both men and women migrate, and children start wage-migration at younger ages of 13-14. The migrant labor market is highly segmented and shaped by caste networks between migrants and contractors who hire them. Kolis migrate as ‘skilled’ laborers in higher-paying work while Adivasis migrate as ‘unskilled’ laborers in low-paying occupations (Breman, 1996; Mosse et al., 2002). In the construction industry, entry wages for Kolis are 70 rupees per day and rise to 200 rupees. Even at the same work-sites, Adivasis are relegated into lower-paying tasks and wages range from 30 rupees (60 cents) per day to 70 rupees (\$1.3). In Mahipura, Adivasis have lower levels of education than Kolis, fewer livestock and lack perennial wells. Table 2 compares Koli and Adivasi educational attainment, well rights, irrigation motor rights and per capita livestock in Mahipura.

Table 2 Distribution of Economic Resources According to Caste

| Resources | Kolis N=105 | Adivasis N=17 |
|-------------------------|----------------|----------------|
| Well rights | 2.59 (SD=0.75) | 1.35 (SD=1.16) |
| Irrigation motor rights | 0.43 (SD=0.46) | 0.2 (SD=0.33) |
| Bulls | 1.76 (SD=0.81) | 0.94 (SD=1) |
| Milk-livestock | 1.6 (SD=1.63) | 0.82 (SD=1.66) |
| Per-capital livestock | 1.13 (SD=0.60) | 0.46 (SD=0.60) |
| Education | 6.9 (SD=4.44) | 3.6 (SD=4.03) |

Source: Household surveys conducted by the author in 2007

Well-rights are scaled from 0 to 3, and 0 indicates no wells, 1 indicates summer-well ownership that provides water only during the rainy season, 2 indicates access to a winter-well with water through most of winter, and 3 indicates access to a perennial well. Kolis have 2.59 well rights on average indicating the ability to grow a second irrigated winter crop and provide partial summer irrigation, constituting surplus production. Average Adivasi well ownership is 1.35, indicating assured production of only a rainfed crop and uncertain ability to provide winter irrigation. Kolis own .43 motors on average while Adivasis own .20 motors, that is, 43 per cent Koli families have an irrigation motor while only 20 per cent Adivasis do.

Bulls are critical for food security because they enable sowing seeds for subsistence. Those without bulls must borrow others' bulls after they have finished sowing their fields and a delay of even a few days affects the harvest adversely. Most households cannot afford the upkeep of two bulls. Instead, siblings with separate households tend to a bull apiece and yoke their bulls for plowing. Each Koli family owns 1.76 bulls on average, far more than the minimum one, indicating adequate fodder availability and surplus production. Each Adivasi family owns .94 bulls on average, less than the minimum one required for joint plowing, indicating that some Adivasis have to

borrow others' bulls. Data on total livestock presents a similar scenario. Each Koli owns 1.13 livestock while each Adivasi owns .46 livestock. Kolis own more milk-livestock comprising cows and buffaloes, with 1.6 milk livestock on average against Adivasis' .82. Koli-Adivasi disparities in wells, motors and livestock are statistically significant (for wells, t value= 2.2, d.f.=120, p=.02; for motor rights, t value= 2.01, d.f.=120, p=.04, for livestock, t value=3.74, d.f.= 120, p=.0003.)

A marked disparity between Kolis and Adivasis is divergence in education among men in the 'political cohort' aged 20-55 comprising men active in village politics (Krishna, 2002). The average education among Koli men is 6.9 years while the average for Adivasi men is 3.6 years.

Panchayat Structure, Actors and Distribution of Power

Mahipura is part of a three village panchayat comprising Mahipura, Limdi and Himmatpur, with the contest for the sarpanch's position usually being between Mahipura and Himmatpur, the larger villages' sarpanch-candidates. The village panchayat consists of the sarpanch elected by all adults of the villages that comprise a panchayat. Panchayati Raj is under state governments' jurisdiction; therefore each state designs its own specific rules of local self-governance. In Gujarat, a panchayat consists of a population of approximately 1,500 people. In semi-arid districts, one large village may have its own panchayat while smaller villages comprising 600-800 people might have two or three contiguous villages being under one panchayat. The panchayat council comprises the sarpanch and ward members who are elected from each electoral ward of the village which overlaps with hamlet boundaries. Each ward-member represents 300-400 people. In the Mahipura panchayat, Mahipura and Himmatpur each have two ward-member seats

while Limdi has one ward-member seat. Voters elect the sarpanch from among panchayat-wide sarpanch-candidates and ward member from their respective wards.

The panchayat carries out its work at monthly panchayat council meetings involving the sarpanch, ward members and the panchayat secretary (*talati*), who is the lowest-level government agent in the community. The panchayat secretary also collects taxes and manages land records. The panchayat secretary assists the sarpanch in filling forms to secure funds for development schemes, signs checks to disburse funds to the sarpanch and shares information on new schemes. At the first panchayat council meeting of a new panchayat, the council elects its deputy sarpanch from among ward members. The deputy sarpanch acts on behalf of the sarpanch in his absence.

Institutional power in the panchayat is concentrated in the sarpanch and panchayat secretary. The devolution of political power with decentralization has been accompanied by the recentralization of executive power, so that the panchayat secretary wields significant control over panchayat resources. Panchayat secretaries are in charge of disbursing monies to sarpanches and an overburdened Block Development Officer can exercise limited oversight over panchayat secretaries, therefore panchayat secretaries have considerable opportunities to skim off resources from the panchayat. The Limkheda Block Magistrate remarked:

The morale and incentives for lower level staff in the government are a huge problem. Clerks, section officers, junior officers- the highest corruption is at that level. Panchayat secretaries are the wealthiest in a district and the most corrupt- they take bribes from above and from below. Promotions entail bribery, and even in tribal areas, panchayat secretaries keep aside 300,000- 700,000 rupees for a

bribe for their promotion.

The sarpanch and panchayat secretary act in collusion because they jointly operate the panchayat's bank account. There is no mechanism for oversight by ward members in the panchayat's financial transactions. Ward members deprecatingly describe themselves as those who 'roam around behind the sarpanch', using the Gujarati phrase *vaade-vaade* (behind) to pun on the word 'ward'. Ward members exercise control over the sarpanch only in the case of public goods and village-wide development schemes.

The panchayat council deliberates on development projects at its monthly meetings. The sarpanch and ward members are mutually dependent in approving activities because the sarpanch requires ward members' signatures to approve his development proposals, and ward members require the sarpanch's approval of their request for funds to implement projects. Mahipura's ward-member Veera, 45, elaborated:

If there's a road building project, all the hamlets get together and figure out which route works best. We hold a meeting at the panchayat office on a particular date. Then all the ward members put forth concerns or justifications concerning their wards. The panchayat secretary records all the demands and submits the proposed activity to the block panchayat. The block panchayat accepts or rejects the request as it sees fit, and then the work commences.... If the sarpanch says, 'We will bring the project here' and a particular ward member doesn't approve of it, the ward member can say so- he has every right to. We are fully allowed to record our demands with the sarpanch.

The panchayat rather than the village watershed development committee is the salient analytical unit for studying how watershed development unfolds in the community because control of the committee is vested in the sarpanch, precisely for the central state to be able to deliver patronage to the sarpanch. The sarpanch selects watershed development committee members on the basis of reciprocity, mutuality and trust between the sarpanch and pivotal actors who are included in committees from among village leaders including ward members, lineage leaders, patels, development brokers, religious leaders, contractors, political parties' grassroots workers and government employees.

In an institutional framework of panchayat implementation, financial power in watershed development is vested in the sarpanch, who receives all monies through checks from the block office, and in turn disburses funds and inputs to beneficiaries. Watershed development committee members that I interviewed including lineage leaders and kin of the de facto sarpanch Shankar report that they were never invited to attend a meeting of the panchayat council to discuss watershed development activities, and their only role had been to attend a training session with the sarpanch at Limkheda to learn about watershed development's objectives, activities and delivery mechanisms.

The Distribution of Power across Individuals and Lineages

Mahipura's leader Shankar, a leader of the Chauhan lineage had 'won' the panchayat election in 2002, being the sole sarpanch contestant from Mahipura and making his wife contest the election as a 'proxy candidate' as the seat was reserved for a woman. The next panchayat election was in December 2006.

The numerical distribution of lineages is enumerated in Table 3. The Barias are the largest lineage with 49 households followed by the Patels with 28 households and

Chauhans with 23 households. The main protagonists of struggles over development involve these three Koli lineages. The Chauhans control the office of the sarpanch on the basis of their numerical compactness compared to the larger Barias and Patels, and vote as a unity, out-voting other lineages in electing their candidate to the panchayat. Different sections of the Chauhan lineage identify only one lineage-leader, Shankar, while the Patels identify two lineage-leaders and the Barias identify four, indicating the fragmented nature of these larger lineages.

Table 3 Distribution of Households According to Lineage

| Lineage | Number of households | Proportion in the village |
|---------|----------------------|---------------------------|
| Chauhan | 23 | 18.5 |
| Baria | 49 | 39.5 |
| Patel | 28 | 24 |
| Taaviad | 14 | 11 |
| Nayak | 3 | 2.4 |
| Labda | 4 | 3.2 |
| Bhabhor | 1 | .08 |

Source: Household surveys conducted by the author in 2007

Shankar, 45, is known as the finest orator across Mahipura, Himmatpur and Limdi; expends the same financial resources on his daughters' education and careers as his sons'; and is respectful towards women who say they would not hesitate to go to his house alone at night to call him to resolve a conflict. Shankar is a career politician who contested his first election in 1994. A patel then, Shankar won the first panchayat election because Himmatpur's vote got divided among its numerous candidates. Shankar is an expert strategist who co-opts, divides, sets up false candidates in an election to divide an opponent's vote, and has built a small but significant voter base in Himmatpur, the opposition village. Even though older Chauhans scoff at Shankar's political ambitions,

his distant manner and self-importance, all acknowledge his command of the law. Shankar is illiterate but has his children read pamphlets, leaflets and development schemes' guidelines aloud to him every evening and memorizing them. Over a 15-year political career, Shankar had amassed a plethora of knowledge on development schemes. Shankar recently fought for a seat in the Limkheda block panchayat as the Congress' candidate, losing the election by less than 200 votes.

The Chauhans consider themselves a privileged lot in Mahipura. The Chauhans have the best access to markets, information on subsidies, and wage-employment on works that Shankar delivers to them. The Chauhans have the highest levels of government employment and education. As Table 4 illustrates, Chauhan men in the political age-cohort have the highest educational attainment of 9.3 years, followed by Barias and then Patels.

Table 4 Educational Attainment among Men Aged 20-55 According to Lineage

| Lineage | Years of school attendance | Median | Standard deviation |
|---------|----------------------------|--------|--------------------|
| Chauhan | 9.30 | 10 | 4.38 |
| Baria | 6.65 | 8 | 4.32 |
| Patel | 5.88 | 6.5 | 4.05 |
| Taaviad | 4.07 | 4 | 3.79 |
| Nayak | 0 | 0 | 0 |
| Labda | 3.25 | 2 | 4.27 |
| Bhabhor | 9 | 9 | - |

Source: Household surveys conducted by the author in 2007

The Mahipura sarpanch seat was reserved for a woman in 2002, and as is widely practiced, Shankar installed his second wife Kampa as a proxy candidate to contest the election. Reservation is carried out by rotation across panchayats, with the sarpanch's seat being reserved for a woman every third election in each panchayat, and in each election, one-third of the ward members' seats in every panchayat being reserved for

women. In the Mahipura panchayat, all contestants, exclusively male, had contested the election by naming their wives as formal candidates. Shankar and his first wife Charu are illiterate, and as Shankar's involvement in panchayat politics deepened and women's reservation in panchayats was enacted, Shankar married an educated woman who he could install as a nominal sarpanch. Bigamy is uncommon but not exceptional among wealthy Kolis. The practice of installing spouses and daughters-in-law as nominal sarpanches is widespread and men who rule panchayats through their spouse or daughter-in-law are called *pati-sarpanch* ('husband-sarpanch') and *sasra-sarpanch* ('father-in-law sarpanch') respectively.

Panchayati Raj led to the rise of powerful women in Dahod even before women's reservation was enacted, but women leaders are still few in number. However, reservation of one-third seats in panchayats for women has led to some women in the political cohort aged 20-50 deciding to contest elections and considering politics as a viable career. This is facilitated by growing female literacy, changing gender norms, the state's attempt to strengthen women's formal rights to land ownership, and intervention by external actors- social movements, NGOs and women's micro-credit enterprises- to increase women's political representation.

Male career politicians, lineage leaders who contest as sarpanches and ward members, patels and male panchayat aspirants are threatened by women's (and Dalits' and Adivasis') entry in panchayat elections. Male leadership resists women's political participation because it broadens electoral contestation beyond men to include women, Dalits and Adivasis. Shankar refers to unreserved seats as 'men's seats'- tacitly stating that women candidates may not contest an election on a general seat. Upon my clarifying

that unreserved seats were ‘general seats’ which men and women alike could contest, Shankar said viciously, ‘We have given you your 33 percent (reservation). Stay with that. You won’t get any more than that.’

Most women still remain puppet sarpanches for male relatives, and at block-level meetings where the District Rural Development Agency’s technocrats share information on schemes with sarpanches, bureaucrats lament that not one sarpanch in attendance is a woman. Early in 2006, women panchayat leaders affiliated with Mahila Swaraj Abhiyan (Women’s Self-Governance Movement) sent a petition to the state-level Ministry of Panchayati Raj Institutions demanding that that *pati sarpanchs* not be allowed to sit in meetings with their wives. Women leaders also demanded that bureaucrats mandate that *pati-sarpanches* and *sasra-sarpanches* not take decisions or cast a vote at these meetings.

While scholarship by Esther Duflo and Rohini Pande is correct in arguing that women leaders deliver women-centered public goods in greater proportion than men (Chattopadhyay & Duflo, 2004; Pande, 2003), a large-N research design does not measure whether women leaders are nominal or effective leaders and such a design may contribute to a significant effect size despite the fact that more women-leaders may be de jure leaders than de facto leaders. The Mahipura panchayat’s sarpanch’s seat and two ward members’ seats were reserved for women in 2002, but both the sarpanch and ward-members were women propped by their career-politician husbands as candidates. No independent women leaders have emerged in Mahipura and a contributing factor may be greater Hinduization and patriarchal norms among Kolis than Adivasis, which restrict women’s mobility, property rights and land ownership. Throughout the dissertation, I will use the terms sarpanch and ward member to refer to the person who held de facto power

rather than the person who was elected de jure.

The Barias are Mahipura's largest lineage and comprise 49 households, constituting almost 40 per cent of the village's families. The Barias hold 178 votes, commanding 37.7 per cent of the village's vote share. While the Barias are politically powerful, they are also the most segmented of all lineages in Mahipura. The Barias dominated politics in Mahipura in the pre-panchayat era of the patel's rule, and boast three patels who governed Mahipura including Mahipura's longest-tenured patel Jethra. While the sarpanch controls development; Jethra adjudicates interpersonal disputes and reports serious offences such as murders to the police. Jethra is well-known among police officers and political parties' leaders, and he rather than the sarpanch investigates deaths under suspicious circumstances. In the following account, I show how the patel exerts palpable political control over the community.

Jethra recently examined the death of a newly-married Patel bride after repeated quarrels with her husband. The Patel youth was physically abusive with his wife and the village's lineage-leaders warned him that if he did not mend his ways stricter punishment would follow. Upon the young woman's death, her family drove up to Mahipura in a tractor-carrier filled with kin in a show of strength, threatening dire consequences if Mahipura's leaders did not establish the cause of her death.

The Patel youth insisted that the woman had committed suicide. Jethra examined her body and stated that there were nail marks around her throat which indicated that she was strangled. Jethra informed Shankar the sarpanch that the woman had been murdered. Shankar requested Jethra to report the case to the police as he had examined the body. Jethra called the police station for a jeep and took the Patel youth to the police station and

deposed evidence against him. Murder often involves testifying against someone from one's own village, and only a powerful patel backed by the state and sarpanch can testify against a fellow-villager, yet not face retributive action from the accused. The government selected patels based on their fearlessness, leadership, and economic power. Jethra describes his own interview for the patel's position thus:

The Mamlatdar (Block Revenue Collector) asked me, 'If there's a quarrel what'll you do?' I said, 'I'll ask both the parties what the quarrel is about, resolve it and not let the matter come to the police station. If there's death, I'll inform the police and let them take the body for post mortem. And I will let them take the accused to jail.'

In another case of a suspicious death, Jethra established death due to accident rather than injury despite all evidence pointing to deliberate harm. In this context, the father and son exchanged blows in an inebriated state over the question of land division and the son reported the father's death soon thereafter, saying that his father climbed a tree to harvest leaves for his goat, lost his balance, fell and died. Jethra took the son's word for it, in marked contrast to the strangulation case where Jethra examined evidence carefully, in no small part due to the bride's family deploying threats. I found the account of a tree-fall death highly implausible because livestock are last fed at dusk rather than nightfall, and people, even when drunk, do not climb trees at night for practical reasons of poor visibility and superstitious reasons of spirits inhabiting trees. I told Jethra as much, who clarified, 'If they turned the son in for killing the father we'd not only have to do the father's last rites (*vidhi*) but also try to get the son out of jail to pay for them.' If

the son were sent to jail because the patel ruled that he had murdered his father, the burden of organizing his father's death feast that costs upward of 20,000 rupees would fall on village leaders. Therefore Jethra chose to believe the son's account. Jethra described what transpired at the police station when he reported the death:

The Superintendent of Police (*jamaadaar*) said, 'What happened?'

I said, 'He fell from a tree. You're not to do anything to the son.'

He said, 'You'll have to give me some money.'

I said, 'I'll borrow 300 rupees tomorrow and get it to you the day after.'

He said, 'No, 500.'

I said, 'No, 300.' And we settled it at that. Then I told the *jamaadaar*, 'We'll make the case that he fell from a tree and we took him to the doctor house but he died en route.'

The matter of establishing criminality is shaped by contingency and coercion, not necessarily 'truth', therefore Jethra, who establishes criminality, commands immense power. Jethra's decision was shaped by economic contingency. 'Truth' is open to manipulation on the basis of all parties' circumstances, and the ambiguity of establishing criminality and the police's reliance on the patel's account makes the patel one of the most powerful actors in the village. Sarpanches rely heavily on village patels to deal with serious offences and present the village as peaceful and law-abiding. Therefore Jethra's role as a patel makes him as powerful as the sarpanch, enabling him to command development for himself, his hamlet and Barias. Shankar has made Jethra the vice-chairman of Mahipura's tree-growers' cooperative established in the village to afforest grazing land and harvest timber when trees reach maturity.

Because of their large size, the Barias are divided into several sections, each with its own leader. In addition to Jethra who is a lineage-wide leader, Baria leaders include Paaru, the youngest Baria leader who was a ward member from 2002 to 2006. Ward-member actors are subsumed within lineage-leader actors- a ward member is necessarily a lineage leader but every lineage leader cannot be a ward member. Ward members are territorial and their spatial rule combines two or three hamlets, therefore one ward member is elected from among many lineage leaders.

The Barias are spread across four hamlets with varying proximity to the Chauhans. The Barias' numerical size, control over the institution of *patlai*, representation on the panchayat through a ward member, proximity to Chauhans, and influence over the forest cooperative makes them one of Mahipura's most powerful groups. However, the Barias' overall wealth is less than the Chauhans' and Patels', with lower access to perennial wells, livestock and irrigation motors. The Barias' fortunes are entwined with the Chauhans because of greater dependence on development schemes controlled by the sarpanch.

Unlike the Barias, the Patels, Mahipura's wealthiest lineage are autonomous from the sarpanch. The Patels enjoy symmetric relations with the sarpanch and conduct their internal affairs independent of the main village. The Patels inhabit Bordi hamlet which is a 20 minute walk from the main village. The forest surrounding Bordi is out of bounds for people and livestock due to the hazard of drowning when water is released from the Patangadi dam's reservoir. The dam's reservoir recharges the water table of adjoining villages, and Bordi's cultivators dig 20-30 feet less for a perennial well than the main village's farmers. As a result, the Patels have the highest ownership of perennial wells in

Mahipura, as described in Table 5. Twenty-four out of 28 Patel families comprising 86 per cent of all Patels have water rights in perennial wells, followed by the Chauhans with 78 per cent and the Barias with 59 per cent families.

Table 5 Ownership of Perennial Wells According to Lineage

| Lineage | Perennial irrigators | Percentage in the lineage | Percentage in the village |
|---------|----------------------|---------------------------|---------------------------|
| Chauhan | 18 | 78 | 26 |
| Baria | 20 | 59 | 28.9 |
| Patel | 24 | 86 | 34.7 |
| Taaviad | 5 | 35 | 7.2 |
| Nayak | 0 | 0 | 0 |
| Labda | 2 | 50 | 2.8 |
| Bhabhor | 0 | 0 | 0 |
| Total | 69 | | 100 |

Source: Household surveys conducted by the author in 2007

Motor and livestock ownership are closely associated with perennial wells. Perennial well-owners invest in irrigation motors worth 10,000-20,000 rupees to lift water from deep wells with pipes. The Patels have the highest motor ownership at .55, indicating one motor between two households, followed by the Barias with .42 motor rights and the Chauhans with .31, as outlined in Table 6. The Labdas have the same motor rights as the Patels. The Taaviads lag in motor rights and the Nayaks and Bhabhors have none.

Table 6 Average Motors Rights According to Lineage

| Lineage | Average motor rights | Median | Standard deviation |
|---------|----------------------|--------|--------------------|
| Chauhan | .31 | .2 | .38 |
| Baria | .42 | .33 | .48 |
| Patel | .55 | .41 | .52 |
| Taaviad | .27 | .12 | .36 |
| Nayak | 0 | 0 | 0 |
| Labda | .5 | .5 | 0 |
| Bhabhor | 0 | 0 | - |

Source: Household surveys conducted by the author in 2007

Perennial well-ownership enables cultivating in all three agricultural seasons and the luxury of growing fodder crops like *bajra* (barley). The water-rich Patels have the highest per capita livestock holdings, delineated in Table 7. The Patels have 1.28 cattle per capita while the Barias have 1.08 and the Chauhans have 1.04. These groups are followed by the Labdas and Taaviads with .91 and .66 per capita livestock respectively, and trailed by the Nayaks with only .15 per capita livestock.

Table 7 Average per Capita Livestock According to Lineage

| Lineage | Per capita livestock | Standard deviation | Median |
|---------|----------------------|--------------------|--------|
| Chauhan | 1.04 | .32 | .98 |
| Baria | 1.08 | .62 | 1 |
| Patel | 1.28 | .72 | 1.15 |
| Taaviad | .66 | .73 | .42 |
| Nayak | .15 | .13 | .19 |
| Labda | .91 | .68 | .74 |
| Bhabhor | 0 | - | 0 |

Source: Household surveys conducted by the author in 2007

The Patels are the second largest lineage in Mahipura with 28 families comprising 24 per cent of the village's households, and hold 101 votes comprising 21.3 per cent of Mahipura's vote share, the second-highest after the Barias. The Patels are known to drive a hard bargain with all candidates in a panchayat election, aided by their numerical size, cohesive voting behavior, and low dependence on electoral outcomes due to their wealth. This leads sarpanches to deliver disproportionate resources to the Patels.

The Patels have two leaders, Bharat, 28, the wealthiest Patel, and Veera, 45, from Shankar's cohort. Veera is a founding member of the milk society along with Shankar, and protects Patel milk-sellers' interests in the society. Veera contested the first panchayat election in 1994 against Shankar but lost, and has subsequently only contested the ward member's seat from Bordi hamlet, winning it each term. Veera was a ward

member from 2002-2006. When Mahipura formed the Tree Growers' Cooperative Society Shankar made Veera its chairman because the main village incorporated Bordi's forest into the cooperative.

Bharat, 28, the second Patel leader controls a smaller sub-lineage and has recently emerged as a lineage leader. Where access to just one perennial wealth is a sign of wealth, Bharat has water rights in three perennial wells, owns two bulls, four cows, five buffaloes and 12 goats; a motorcycle, a diesel motor and an electric motor. Bharat lends money, gives kin employment as field laborers and negotiates with the sarpanch for public goods in Bordi such as a school for the hamlet.

The next largest group, the Taaviads own sloping land, lack irrigation, and rely on long-term migration to meet subsistence needs. The Taaviads leave the village for 6-11 months. The Taaviads inhabit the Chauhan hamlet but their Baria and Chauhan neighbours do not interact with them and consider them unclean. In a poignant enforcement of social boundaries, Adivasis like the Taaviads never offered me water to drink when I went to their homes in the summer months because Adivasis assumed I would take offence or reject their offer. I always asked for water and while everybody readily gave me water, the Taaviads, my neighbours elaborately rinsed the beaker (*lota*) before offering me water, ritually cleansing it to make it fit for my consumption, tacitly showing me how rigidly boundaries of accepting food and water were enforced.

The Taaviads are followed in number by the Labdas who are Koli. The Labdas are the smallest Koli lineage (N=4) and are considered inferior by other Kolis. The Labdas lost the patel's office to Chauhans due to a Labda patel's misdemeanor, and Kolis

twist their name to *Labad* and *Labaad* which connote sexual deviance. The Labda hamlet is the only hamlet in Mahipura to which the sarpanch did not extend electricity.

The Nayaks are Adivasi and inhabit Bordi. Unlike the Patels, Bordi's other inhabitants, the Nayaks have sloping upland plots, lack irrigation, migrate for 9-11 months each year to earn subsistence wages, and are the least well-off lineage in Mahipura. The solitary Bhabhor family in Mahipura has land and houses at the furthest edges of the main village. The Bhabhors are Adivasi and at the margins of sociality in Mahipura.

Distributional Decisions during the Sarpanch's Ascendance

Shankar, Mahipura's Chauhan leader, won the panchayat's first election in 1994, and after his first victory, monopolized Mahipura's candidature for the sarpanch's position on the basis of early familiarity with Panchayati Raj's rules, leadership in the milk society and tree growers' cooperative and single-minded pursuit of a political career. Shankar won his second election in 2002. Watershed development was implemented from 2003 to 2008. From 2003 to 2005, the intervention was shaped by Shankar's patronage to Chauhan kin and Baria neighbours and his attempt to keep the powerful Patels in good humor because they controlled Bordi's forest. In this early phase, watershed development also exhibited a strong strain of capture by the sarpanch, reflecting in-built rules in panchayati raj and watershed development policy that vest decision-making power in the sarpanch.

One of the first watershed development activities implemented in Mahipura was crop demonstration, the intervention's single-most desired activity, which delivered 5,000 rupees worth of inputs including seeds, pesticide, fertilizer, payment for irrigation and

field labor wages. Shankar delivered two demonstration plots to his supporters in Himmatpur given that their votes not only supported him but also undercut Himmatpur's candidates' support base, delivering them 10,000 rupees worth of inputs, and appropriated two plot monies worth 10,000 rupees. Shankar also appropriated 5,000 rupees for an afforestation nursery.

Shankar delivered wage-employment on afforestation to Chauhan kin and proximate Barias including the lineage-leader cum ward-member Paaru. Afforestation is one of the largest sources of wage employment because its funds consist entirely of wage-labor payments for digging pits, planting saplings and watering them. Afforestation enables extending smaller patronage to more numerous persons and reflects asymmetrical relations of dependence between the sarpanch and dependent client-voters such as Chauhan kin and proximate Barias, who are constrained in building alternative patronage channels due to social norms of voting for one's kinsman in the Chauhans' case, and economic vulnerability in the Barias' case.

The older Patel leader cum ward-member Veera, 45, secured materials and wage employment for dam building in Bordi, allotting wage-labor worth 1,100 rupees to his kin. Bharat, 28, the younger Patel leader secured 5,000 rupees for a nursery for afforesting Bordi's section of the village forest. Bharat insisted on purchasing saplings and polyethylene bags and transporting the materials to be able to strike deals with the nursery owner and transport operator for discounts.

In February 2003, Shankar formed Mahipura's first self-help group 'Saraswati', named after the Hindu goddess of learning, for Chauhan hamlet residents comprising Chauhans and a few Barias. The group purchased subsidized buffaloes and Shankar

bought four of the group's 11 buffaloes. The watershed development team's social development expert reports that sarpanches are loath to distribute benefits widely and social development experts have to pressurize sarpanches to broaden self-help group formation beyond their own lineage. Therefore when Shankar formed the next micro-credit group 'Gayatri', the social development expert allowed him to include Chauhans only if the group were a disability group. This group comprised disabled Chauhans, Barias and Patels, with non-disabled members being added thereafter. However, Shankar vested leadership in his Chauhan kin and the group did not conduct meetings after the first two months. Group leaders did not give Baria and Patel members a written record of their bank deposits. Barias and Patels left the group after discord and the sarpanch added Chauhan members in 2005. Shankar used this puppet group to purchase a subsidized tractor for himself, sharing smaller benefits with some Chauhan members, described in chapter 5. Watershed development in 2003-2004 exhibited a strong strain of elite capture, with Shankar securing four buffaloes, a tractor, two demonstration plots and a nursery.

Capture by the sarpanch was facilitated by both external rules in Panchayati Raj and watershed development policy which vest disproportionate power in the sarpanch and lack institutions above sarpanches that people can reach up to to challenge the panchayat leader. While panchayati raj's guidelines provide for impeaching a sarpanch, this action requires the signatures of more than a third of the village assembly and submitting the petition to the District Magistrate, the highest-level administrator of a district, a civil servant. The collective action costs of dismissing a sarpanch are prohibitive because of the coercive power that sarpanches command through synergistic relations with informal institutions of dispute-resolution whose leaders are their clients,

assisting the patel in establishing criminality, and control over economic resources. Sarpanches can retaliate against those who organize a vote of no confidence by filing false police cases. The no-confidence motion has in fact been used by powerful ex-sarpanches to dismiss legitimately elected women and Dalit leaders in panchayat elections (MSA, 2004). Government officials themselves avoid exercising this provision due to the public sanctity of elected leaders and government officials' dependence on panchayat leaders to execute development.

While village assemblies, identified as the mainstays of Panchayati Raj, are assumed to introduce publicity, transparency, probity and openness to panchayat decision-making; participation, accountability and answerability are reduced to single meetings four times a year where elected representatives and voters have asymmetrical access to information on schemes and procedures. Village assemblies are not simply democratic spaces but deeply social and political spaces marked by relations of power shaped by caste, gender, 'social citizenship'- dominant norms of inclusion and exclusion in the community, and birth order.

For instance, social norms in Mahipura prohibit women from attending the assembly, except at a once-a-year meeting attended by district- and block-level government officials in an attempt to bring the state closer to the people, when panchayat leaders might be severely reprimanded for the absence of women, and in Koli-dominated villages, women are included in village assemblies only in this village assembly of high visibility. Caste rules dictate that Adivasis sit at the outer edges of the assembly. To narrow the scope of participation, some panchayats, including Mahipura insist that only the oldest brother in each extended family participate in the assembly on behalf of all his

siblings' households. Village assemblies are controlled by the panchayat, particularly the panchayat secretary, the sarpanch and the deputy sarpanch who set the agenda.

A village assembly is announced one to two weeks in advance by the panchayat peon who goes from house to house to inform people of the date, time and venue. But neither the meeting's agenda nor its proposals are shared with voters in advance. The panchayat agenda, crafted largely by the secretary consists of routine affairs related to child immunization, controlling public health hazards, exhorting villages to refrain from encroaching on grazing lands, encouraging them to participate in afforestation, monitoring the village school's activities, installing handpumps in new settlements, asking villagers to pay taxes, and announcing new schemes. In a reading of Mahipura and Himmatpur's village assemblies' minutes, Hariyali was mentioned in just one meeting which announced its initiation, despite it being the single-largest intervention in Mahipura. Panchayats are better understood as forms of statemaking- the state's attempt to extract resources, govern behavior, secure compliance and legitimize rule, than as spaces of self-governance.

Bargaining over development is conducted not at village assemblies but at the panchayat council's internal monthly meetings with narrowed contestation between ward members and the sarpanch. A comparison of the panchayat's internal monthly meetings' minutes with those of village assemblies revealed that most distributional decisions were taken at monthly meetings rather than village assemblies which opened spaces for voters to participate in meetings and could produce unexpected outcomes, or at the very least, protracted verbal conflicts.

By and large, conflict and negotiation are concealed in written texts which presented a bland narrative of proceedings and simply stated final distributional decisions rather than deliberative proceedings. Minutes invariably state that decisions were taken by consensus (*sarvamati sammat*) because panchayat secretaries, sarpanches and ward members seek to present solidarity to higher level officials who may inspect panchayat documents. This is an attempt to maintain panchayat sovereignty over local politics rather than allow external actors to gain insight into fissures within panchayats and village assemblies which they might exploit for larger ends of statemaking. Limkheda's recently appointed Block Magistrate exuded frustration when he commented on the opacity of the Limkheda block panchayat's meetings' minutes, presented as blandly as lower-level panchayats' records:

You'll never see anything in the block panchayat's meetings' minutes. In the written documents everything has to look *proper and perfect*. You'll always find the statements 'everyone agreed to the proposal', and 'it was decided by consensus'.

The distribution of large inputs- crop demonstration, nurseries and dam-building reflects Chauhan control over the panchayat and Patel political clout, who have the second-largest vote share in Mahipura and are least dependent on development patronage. The sarpanch and the two Patel leaders not only secured wage employment but also serviced their own client networks by distributing resources to kin. Watershed development was shaped by both direct channels of patronage between the sarpanch and voters and indirect channels mediated by lineage-leaders and ward-members. Ward

members have extensive information on watershed development through monthly panchayat meetings, and mobilize for resources at these meetings.

Situating the Case within Theoretical Debates and Empirical Evidence

Grassroots democratization is assumed to promote pro-poor development because it enables relatively small constituencies to have greater say in governance through lower-level territorial representation (Agrawal & Ostrom, 2001; Cornwall & Gaventa, 2000; Goetz & Jenkins, 2001; Isaac & Franke, 2002). Elected local bodies' implementation of development is considered an improvement over donor-driven 'community-driven development' (Platteau & Gaspard, 2003) because grassroots democratization makes incumbents' re-election contingent on their performance as development agents (Krishna, 2002).

While one stream of scholarship suggests that grassroots democracy reduces elite capture, another suggests that elected leaders may capture development because it enables them to invest in 'de facto political power' (Acemoglu & Robinson, 2008) which is the ability to shape development and the allocation of public goods irrespective of and in addition to the powers vested through elected office, particularly during years when they are out of office. Capturing development enables sarpanches to increase their wealth to spend resources for the next election; continue to provide patronage to clients, travel to government offices to collect guidelines on new schemes, and limit other actors' ability to challenge their authority in future.

Sarpanches justify development capture because unlike all other elected representatives including block-level and district-level panchayat leaders, sarpanches receive no monthly salary or reimbursement for expenses incurred on travel to offices,

phone calls, photocopying, hosting external visitors, stationery and emergency expenses. Sarpanches allege that they have to bribe the panchayat secretary and the accounts officer at the Block Development Office to obtain funds; and sarpanches spend upward of 100,000 rupees on an election campaign.

In the Mahipura panchayat, candidates give ‘gifts’ to hundreds of voters on election-eve as an advance ‘token of gratitude’ for their vote. In an elaborate routine, each candidate goes from house to house with his spouse with gifts of cloth. Shankar gifted a sari to women voters and a towel to male voters. Tersing, 30, Himmatpur’s candidate gifted unstitched cloth for blouses and underskirts to women and towels to men. Tersing later joked that between himself and Shankar they had assembled a complete outfit for all the women voters and accessories for men. Across semi-arid western India, candidates pay for migrants’ return to induce them to cast their vote in their favor, pay cash for votes, and host feasts and drinking parties.

Shankar took the lion’s share of watershed development in 2003-2004 but capture was moderated by kin-based reciprocity and mutual vulnerability with the Baria and Patel leaders who assist him in mediating disputes and influence their lineages’ voting behavior. As Hariyali was announced at the village assembly as is mandatory to do, everyone in the village knew that Hariyali was implemented in Mahipura. People refer to watershed development as ‘*Hariyali Kranti*’ or ‘watershed revolution’, the moniker bureaucrats, technocrats and sarpanches themselves use to describe it. Development subjects in Mahipura identify the intervention with the delivery of seed kits.

Election and Distributional Expansion

Most studies of democratic decentralization treat the community as a passive site rather than an actor that responds strategically to electoral democracy. Periodic elections institutionalized by democratic decentralization broaden political contest when an election approaches. The impending panchayat election in 2006 increased Baria and Patel leaders' power vis-à-vis the sarpanch on the basis of control over their lineages' votes, which the sarpanch would have to remobilize for the 2006 election. In what follows, I show how conflict over the village forest led the Patels to withdraw their support for the incumbent sarpanch, and how political brokers used vote-promises as bargaining tools to secure material technologies from the sarpanch.

Mahipura crafted a tree-growers' cooperative in 1997 with assistance from the National Tree Growers' Cooperative Federation to meet household fuelwood, fodder and timber needs. The cooperative leased 40 hectares of grazing land from the Revenue Department and planted shorea robusta (*sal*) saplings to be harvested 15 years later, when the trees reached maturity in 2012. Bordi's verdant forest adjoining the out-of-bounds catchment area of the Patangadi dam is free of encroachers an easy to protect because of its location, and Bordi's rich patch was incorporated into the cooperative's lease because trees under a cooperative's jurisdiction could be harvested while those under the Revenue Department's control could not. Shifting tenure to the cooperative provided all households an opportunity to legally fell Bordi's trees.

Shankar became the secretary of the cooperative because he was the National Tree Growers' Cooperative Federation's contact-person in Mahipura, and at the

cooperative's first general body meeting, Shankar proposed his own name as the cooperative's secretary. Shankar secured the powerful Patels' support for his candidacy by proposing that Veera, the senior Patel leader from Bordi, be made the chairman; and secured Baria support by making Jethra, the Baria Patel the vice-chairman. Veera and Jethra were strategic choices. Making Veera an office-bearer recognized the Patels' rights to Bordi's forest while simultaneously co-opting Veera in leadership structures. Jethra, who is from the main village, could be trusted to take the main village's side in any dispute that might arise between the main village and Bordi over property-rights to Bordi's trees. Every household in the village was made a shareholder in the cooperative (NTGCF, 2004).

Afforestation in the main village's denuded section was unsuccessful because of the forest's long open boundary with neighboring villages which was left unfenced, given that fencing forests is an expensive proposition because it entails building miles of trenches, stone walls or barbed wire fences, which are often damaged by intruders or cattle and are ultimately ineffective. At the end of six years, the main village realized that its forest would yield little timber. During this time, Bordi's naturally inaccessible and easy-to-protect forest flourished. At the cooperative's 2004 general body meeting, Shankar enacted a sleight, proposing that all shareholders be given equal claim to Bordi's forest at harvest in 2012. This was approved by the main village including the Chauhans and Barias.

While village forests are considered common property, rights are in fact discrete and fine-grained (Spiertz, 2000; von Benda-Beckman, 1995). Each hamlet accesses only specific sections of the forest proximate to it. Bordi's customary rights over its forest

were recognized by the entire village until Shankar proposed novel property rights. This usurped the Patels' and Nayaks' informal rights to Bordi's forest which they had asserted through systematic protection and sustainable use.

The Patels wrote to the Randhikpur Range Forest Officer, the highest-level officer of the range, an administrative level that includes a group of village forests in which Mahipura lay, requesting that the Patels and Nayaks be granted the right to form a separate cooperative with jurisdiction over Bordi's forest. The Patels were denied this request on the ground that Bordi lay within Mahipura and could not be granted a cooperative as if it were a distinct village. The Patels believed that Shankar's familiarity with the Range Forest Officer at Randhikpur was instrumental in the Forest Department rejecting their claim, and retaliated by cutting down on social intercourse with Shankar. The Nayaks and Patels stopped attending the tree growers' cooperative's meetings and did not sign on any of the cooperative's resolutions from then on. This undermined the cooperative's legitimacy, particularly because Veera, the senior Patel leader was the cooperative chairman. This created uncertainty about the cooperative's future and whether Mahipura's lineages would have access to Bordi's forest at all, and the main village's lineages started felling trees in the main village's protected area clandestinely to harvest whatever little timber there was. In 2006, the Patels announced that they would not support Shankar's reelection, a move that signified likely defeat for Shankar.

Enter Micro-Credit

The Patels effectively increased the price of their votes. Shankar responded to the Patels' withdrawal of support by helping each Patel leader fill forms to create micro-credit groups in 2006, an election year; and to ensure continued Baria support, assisting

the Barias in forming a micro-credit group. Micro-credit generated a stream of benefits including seed kits, fertilizer, motors and tractors, and signified generous development-sharing by the sarpanch. While Limkheda's social development expert had conducted two meetings in Mahipura in 2003 to familiarize people with micro-credit, Shankar only formed Chauhan groups from 2003 to 2005. In the spring of 2006, Shankar assisted Baria leader Paaru and Patel leaders Bharat and Veera in filling forms and arranged for the social development expert's visit to Mahipura to formalize their groups. Table 8 illustrates the temporal order of group formation in Mahipura. Chauhan groups were formed at the peak of the sarpanch's power and Baria and Patel groups at the height of voters' power.

Table 8 Rate of Self-help Group Formation from 2003 to 2007

| Group | Dominant members | Year of formation |
|-----------|------------------|-------------------|
| Saraswati | Chauhan | 2003 |
| Gayatri | Chauhan | 2004 |
| Surdas | Baria | 2006 |
| Lakshmi | Patel | 2006 |
| Hanuman | Patel | 2006 |

Source: Household surveys conducted by the author in 2007

Grassroots democracy has led to village leadership being characterized by brokerage rather than patronage wherein elected leaders cultivate political support not through their property but by facilitating the delivery of government programs and services (Gupta, 1998). Micro-credit constituted significant development brokerage on the sarpanch's part because it enabled the Barias and Patels secure loans for livestock, seeds, tractors and motors. While a tractor's market price is Rs. 500,000, unaffordable

even for wealthy farmers, self-help groups receive a 50 per cent subsidy, reducing the price to 250,000 rupees.

The Barias planned to buy buffaloes worth Rs. 180,000 with their loan at a subsidized cost of Rs. 130,000. Bharat planned to buy a tractor and Veera hoped to produce organic fertilizer commercially. By 2006, Shankar crafted three of Mahipura's five micro-credit groups for non-Chauhans. Micro-credit allocation was shaped not by the size of Baria versus Patel electorate, but the credible threat made by each group to withdraw support from Shankar. While the election provided the impetus for widening development, the Patels' credible threats forced the sarpanch to allocate them two micro-credit groups, while the Barias, who were disproportionately dependent on development patronage by the sarpanch, secured one group.

The Micro-Politics of Ward Members' Contests

Panchayat elections also involve electing ward members. The ward is the smallest level of political representation and overlaps with hamlet boundaries. The ward member's election may involve a face-off between two members of the same lineage. 'Political brokers' - men in the political age-cohort who are subordinate to lineage-leaders and aspire to lineage leadership contest as ward-member candidates in opposition to leaders of their own lineage. Political brokers are generally younger than lineage-leaders and have a smaller sphere of influence.

Elections involve each ward-member candidate aligning with a sarpanch-candidate, and the pair contesting against another ward-member and sarpanch-candidate alliance. This enables each ward-candidate to make a credible commitment to securing development through his partnership with a sarpanch-candidate. For a sarpanch-

candidate, partnering with a ward-member candidate enables obtaining the support of unknown voters outside his or her village. In 2006, ward member candidates in Mahipura and Himmatpur were divided into two groups that contested as Shankar's and Tersing's candidates respectively. Mahipura has two wards, one comprising the main village and the other Bordi. The incumbent ward members are Paaru, 37, Baria lineage-leader, and Veera, 45, older Patel leader. Both partnered as Shankar's ward-member candidates. Their weaker opponents- Abhay, an aspiring Baria leader and Bharat, the younger Patel leader partnered with Tersing who had a weaker support-base in Mahipura.

In Bordi, Bharat desired to replace Veera as Bordi's representative in the panchayat and gain a foothold into its fascinating workings, secure development and interact with political parties' leaders. Bharat chafed at Veera's higher status as a ward-member and hoped to beat Veera in the 2006 election, travel to government offices with Tersing, his partner sarpanch-candidate, attend panchayat council meetings, and meet the panchayat secretary on a regular basis. In the main village, while the Baria leaders agreed that the youngest of them- Paaru, 38, incumbent ward-member would re-contest his seat, Abhay, an aspiring Baria leader contested as Tersing's candidate against Paaru. Abhay, 36, has studied till the 8th grade and is a forest guard which gives him the symbolic resource of a forester's uniform, the power to fine encroachers, and prestigious government employment. Abhay was frustrated by senior Baria leaders monopolizing lineage leadership and Shankar sharing development solely with already numerous Baria leaders despite Abhay's professional credentials, and partnered with Tersing to gain influence in the panchayat.

Exclusion from Infrastructure Delivery

Two groups in a permanent minority, Bhabhors and a group of Barias inhabiting the Labda hamlet, whom I refer to as the Labda-Barias who Shankar had excluded from development patronage because of their numerical insignificance, partnered with Abhay and Bharat to deliver votes to Tersing in an attempt to secure a better development patron. The Labda-Barias' was the only hamlet in the village that lacked electricity despite all the households in the hamlet having gathered funds for the connection fee and depositing it with Shankar years ago. This mattered because Limkheda is regarded as a developed block and brides marrying Limkheda grooms expect to be going to a village with electricity, and lack of electrification has hindered the Labda-Barias' chances of bringing home suitable brides.

Vikram, 42, a Labda-Baria, mobilized younger Labda-Barias to vote for Tersing to punish Shankar. Ties of communality vie with citizenship aspirations in voting, and older Labda-Barias who felt obliged to vote for their village's candidate voted for Shankar while younger members within the same households voted for Tersing. Vikram's mother, 71, who voted for Shankar reflected:

We lose respect- (being) from the same village (as Shankar) but voting for a different candidate. The older people (*gharda-gharda*) voted for Shankar. We can't change because we've been voting for him for fifteen years. He's our village leader.

With access to one perennial well and two winter-wells, surplus production and cash-crop farming, Vikram and was fearless about retribution from Shankar. 'Shankar did not do anything for us for 15 years (of his political career). So we voted him out. If

Tersing doesn't, we will vote him out too' was Vikram's deliberate response about his vote switch. Electoral support is contingent, not unalloyed- Vikram not only meant to punish a non-performing leader but also a new leader if he did not deliver on his promise.

The Bhabhors, numerically and politically insignificant for Shankar, received no gains from watershed development from 2003-2006 and joined the Labda-Barias, Abhay the Baria aspirant and Bharat, junior Patel leader to deliver votes to Tersing. This heterogeneous dissident group's political choice was shaped by being systematically deprived of development because they were in a permanent minority in the Bhabhors' case; historical deprivation in the Labda-Barias' case; and in Abhay and Bharat's case, desire for inclusion in formal leadership. Dissident groups' choice was also influenced by Tersing reaching out to Mahipura's marginalized groups for votes to break Shankar's voter-base, and his promise of development patronage to Mahipura's dissidents if he won the panchayat election.

A New Cartography of Development Patronage

Both Shankar and Tersing did intense political campaigning, and there was extensive cross-voting by Himmatpur's voters for Shankar as well as by Mahipura's voters for Tersing. Election rules mandate that external actors leave villages during an election so that they cannot influence the electoral process; hence I absented myself from Mahipura during the polling process, but returned to build an account of polling the day after the election. Tersing and his supporters, unsure of a win at the last minute, allegedly snatched ballot papers from presiding officers (who are government school teachers deputed on this duty) at the polling booth, threatened them with violence and stuffed ballot boxes with votes for Tersing. This was the first instance of booth-capturing in

Mahipura and Shankar declared that he had never won an election by capturing a booth and would not do so this time. The election was close and Tersing won.

Shankar had told me that no one would argue that he had not delivered watershed development because he had distributed fruit-tree saplings delivered through the intervention to every household in the village. After the election, reflecting upon the age-cohort shift in the panchayat, with Tersing, a much younger candidate winning the election, Shankar declared that he would groom his sons – 21, 19 and 17 to contest future elections. Shankar is both career politician and capitalist farmer, and both occupations feed into each other. After the election, Shankar busied himself earning rental income from his new tractor, leading the milk society as its chairman, and planning his next move regarding conflict over the tree-growers' cooperative, with the 2012 tree-harvesting deadline approaching. In the panchayat election in 2011, Shankar in fact did not contest and neither did he groom his eldest son, but backed his cohortmate from Himmatpur, demonstrating the contingent and fluid nature of panchayat partnerships and animosities.

Tersing embarked on a slew of development projects after his victory. Bharat, younger Patel leader, and Vikram, Labda-Baria dissident vote-broker who delivered the largest of Mahipura's vote-shares to Tersing received the most remunerative patronage. Tersing delivered a check dam in Bordi to Bharat, which generated 76 person-days of work and wage earnings of 4,250 rupees for Bharat's kin. Tersing built a road connecting the Labda-Barias to the Patels through the National Rural Employment Guarantee Act in May 2007. As a supervisor on road-building, Vikram earned 800 rupees, the equivalent of 29 days' field-labor wages, and two Labda-Barias earned a total of 350 rupees for a week's wage-labor. Four youth in Bharat's sub-lineage earned a total of 2,400 rupees

through 28 days of work laying the road. Wage-distribution among Tersing’s supporters in Mahipura is described in Table 9.

Table 9 Tersing’s Distribution of Watershed Development in Monetary Terms

| Lineage | Monetary reward in rupees |
|--------------|---------------------------|
| Patels | 6,650 |
| Labda-Barias | 1,150 |
| Bhabhors | 0 |

Source: Household surveys conducted by the author in 2007

Social groups that were both poor and numerically marginal, such as the Taaviads did not switch their votes from Mahipura to Himmatpur, but at least some Taaviads cast blank votes in tacit resistance to social exclusion by the Chauhans, including Shankar. Crafting an alternative channel of patronage may be both because the cost of disenfranchisement from social life in Mahipura for the Taaviads may be too high, and because they lack the resources to build an alliance with opposition leaders.

Insights for the Study of Grassroots Democratic Politics

Mahipura’s distributional trajectory shows that grassroots democracy has multiplied power such that political brokers have emerged as a major feature of dryland communities. By creating wards at micro-territorial levels, democratic decentralization has created explicitly politicized hamlet leaders who engage with sarpanch-candidates for development. While scholarship on democratic decentralization has focused disproportionately on leaders’ strategies, panchayat democracy shapes voters’ strategies and brings political ‘public spheres’ (Calhoun, 1996) into being wherein people vote on the basis of the delivery and non-delivery of development, and representation. Accounts of electoral politics assume that candidates are mobile while voters are fixed in space.

However, both candidates and voters are mobile, as demonstrated by political brokers who created alliances beyond Mahipura to meet their goals.

Most studies on democratic decentralization treat the community as a passive site that is simply delivered development goods based on leaders' preferences (e.g. Bardhan & Mookherjee, 2006; Besley, Pande, Rahman, & Rao, 2004; Chattopadhyay & Duflo, 2004) rather than the distribution of development being a dynamic process in which leaders respond to voters' electoral tactics and voters respond to leaders' distributional decisions. Panchayat leaders and voters 'mutually constituted' (Sivaramakrishnan, 1996) each other in Mahipura and need to be seen as two sides of the same phenomenon to shape watershed development. Voters' and sarpanches' strategies were dynamic responses to one another's strategy.

Mahipura's account also shows that democratic decentralization does not eliminate elite capture through ongoing leader accountability but through elections. Electoral democracy shifts the balance of power towards voters when an election approaches (Acemoglu & Robinson, 2008), creating a moment when voters can demand wider distributional outcomes. The sarpanch's distribution of development was influenced by the timing of the election- while the early stages of watershed development from 2003 to 2004 displayed Chauhan capture; lineage leaders used their command over voters in their lineage to convince the sarpanch of their ability to shift their votes to Himmatpur if their demands were not met.

The Impact of Policy on Distributional Outcomes

Aggregating Tersing and Shankar's watershed development activities, the lineage with the largest number of households to receive wage employment, as Table 10 shows,

was Chauhan followed by Baria. This reflects the sarpanch's initial distribution of afforestation and nursery labor to his Chauhan and Baria neighbors. The Patels trailed with three households while the Nayaks had one.

Table 10 Distribution of Wage-Labor Beneficiaries According to Lineage

| Lineage | Beneficiary households | Proportion in the lineage |
|---------|------------------------|---------------------------|
| Chauhan | 5 | 21.74 |
| Baria | 4 | 8.16 |
| Patel | 3 | 10.71 |
| Taaviad | 0 | 0 |
| Nayak | 1 | 33.3 |
| Labda | 0 | 0 |
| Bhabhor | 0 | 0 |

Source: Household surveys conducted by the author in 2007

Table 11 describes the number of mean labor-days of work generated for each lineage in Mahipura. The Chauhans secured the highest number of labor-days on average, getting 5.42 work-days per family. The Chauhans were followed by the Patels with 4.89 average labor-days per family. The Patels were followed by the Barias with just 0.93 mean days of work indicating that wage employment was spread thinly across this large lineage. The Nayak figure is high at 0.33 because of a smaller denominator used to calculate the average as the Nayaks comprise only three households. The distribution of labor-days was highly skewed within each lineage, particularly the Chauhans and Patels whose averages have high standard deviations. This is because leaders did not distribute wage employment beyond their immediate family.

Table 11 Distribution of Wage-Labor Days According to Lineage, 2003-2007

| Lineage | Wage-labor days | Standard deviation |
|---------|-----------------|--------------------|
| Chauhan | 5.42 | 11.76 |
| Baria | 0.93 | 3.51 |
| Patel | 4.89 | 19.71 |
| Taaviad | 0 | 0 |
| Nayak | 0.33 | 0.57 |
| Labda | 0 | 0 |
| Bhabhor | 0 | - |

Source: Household surveys conducted by the author in 2007

Table 12 describes wages earned by each lineage as a whole. It was the Patels who earned the highest wages per household on average at 244.64 rupees, securing wage-labor from both Shankar and Tersing. This reflects the Patels' bargaining advantage in negotiating development with elected leaders. The Patels' wage labor earnings were followed by those of the Chauhans who earned 211.95 rupees on average per household. The Barias lagged considerably behind both the Patels and Chauhans in wage-labor earnings, earning just 38.77 rupees on average. The Nayaks earned 16.66 rupees per household on average, while the Labdas, Bhabhors and Taaviads, the smallest lineages apart from the Nayaks earned no wages.

Table 12 Distribution of Average Wage-Earnings According to Lineage

| Lineage | Wage earnings | Standard deviation |
|---------|---------------|--------------------|
| Chauhan | 211.95 | 608.64 |
| Baria | 38.77 | 142.61 |
| Patel | 244.64 | 985.76 |
| Taaviad | 0 | 0 |
| Nayak | 16.66 | 28.86 |
| Labda | 0 | 0 |
| Bhabhor | 0 | - |

Source: Household surveys conducted by the author in 2007

These figures reflect the numerical size and vote-share of lineages, presented in Table 13, with the largest share of wages going to the Chauhans, Patels and Barias with

93, 101 and 178 voters; and the ability of each lineage to make credible threats of withdrawing support from a candidate.

Table 13 Distribution of Voters According to Lineage

| Lineage | Number of voters | Proportion in the village |
|---------|------------------|---------------------------|
| Chauhan | 93 | 19.7 |
| Baria | 178 | 37.7 |
| Patel | 101 | 21.3 |
| Taaviad | 59 | 12.5 |
| Nayak | 19 | 4 |
| Labda | 16 | 3.3 |
| Bhabhor | 6 | 1.2 |
| Total | 472 | 100 |

Source: Household surveys conducted by the author in 2007

Overall earnings from wage employment are low and represent distributional rules embedded in policy which allocate more resources to capital-intensive activities and channel funds for purchasing materials and inputs rather than labor. While policy accounts for low overall wage employment, local politics shapes its distribution within the locality. In light of this, the National Rural Employment Guarantee Act is an important countervailing policy that is relatively labor-intensive, although the share of capital in this intervention has steadily increased and stands at a high of 40 per cent. The National Rural Employment Guarantee Act was implemented in Mahipura simultaneously with watershed development, with two dams being built, one road being laid and Mahipura's tank being deepened through the scheme. Of all activities, tank-deepening was the only labor-intensive one, with dams and the road involving disproportionate expenditure on materials.

Consider the distribution of watershed development by wealth quintiles, described in Table 14 in terms of livestock-wealth. The highest wealth quintile earned the lion's

share of watershed development in monetary terms, securing an average of 22,423 rupees per family. The second-highest wealth quintile secured the next highest share, obtaining an average of 4,144 rupees per family. The third-highest wealth quintile appropriated the third-highest returns, securing 2,302 rupees per family on average. The fourth-highest quintile secured a monetary worth of 878 rupees. The lowest quintile secured slightly higher returns at 1,141 rupees. While not the only axis, wealth was a major axis shaping watershed development. The results also indicate greater inequality at higher wealth quintiles, with the resources secured by the second-highest quintile constituting less than 25 per cent of the highest quintile's share, while the third-highest quintile's share was approximately half of that secured by the second-highest quintile. The capital-intensive resources delivered by watershed development since the 2000s constitute an upward distribution of policy.

Table 14 Distribution of Watershed Development by Livestock Quintiles

| Livestock-wealth quintile | Watershed development gains in monetary terms | Standard deviation |
|---------------------------|---|--------------------|
| 1 | 1,141 | 3912 |
| 2 | 878 | 3309 |
| 3 | 2,302 | 5017 |
| 4 | 4,144 | 9990 |
| 5 | 22,423 | 109602 |

Source: Household surveys conducted by the author in 2007

The distribution of watershed development in terms of well ownership likewise corresponds to disproportionately large shares for the highest quintile. As Table 15 shows, the average monetary share of watershed development for households without wells was 70 rupees, the average monetary share for those with monsoon well rights was 300 rupees, the average monetary share of for those with winter wells was 881 rupees,

and the average share of watershed development for households with perennial wells was 9,437 rupees. However, the range of monetary share by well-ownership is 9,367, lower than that for livestock quintiles which is 21,282, because wells are shared property while livestock are private property.

Table 15 Watershed Development's Distribution According to Well-Type Categories

| Well type | Average monetary share of watershed development | Standard deviation |
|-----------------------|---|--------------------|
| No well | 70 | 115.95 |
| Monsoon well rights | 300 | 294.39 |
| Winter well rights | 881 | 3105.21 |
| Perennial well rights | 9,437 | 62173.60 |

Source: Household surveys conducted by the author in 2007

Conclusion

Democratic decentralization and development policy interact with power inscribed in identity, historical patterns of settlement, and informal governance institutions that shape the resources that different actors command in interactions to secure watershed development. Watershed development flowed along electoral alliances. Democratic decentralization's rules of period elections and ward-based representation interacted with informal norms of village governance, lineage leadership, and property rights to natural resources to shape actors' resources endowments and bargaining strategies, and watershed development was the outcome of these negotiations.

5. Neoliberal Governmentality and the Locus of Micro-Credit at the Margins

Micro-credit is watershed development's linchpin because it transforms the technological possibility of cash-crop production into a reality by extending bank credit to purchase commercial inputs. This chapter describes the institutional framework through which micro-credit is organized in watershed development, the role of transaction costs in shaping decision-making in group-based lending, the capabilities required for specific decisions, and why this leads to specific actors taking certain decisions in self-help groups.

Political society actors and contractual staff provide the institutional scaffolding through which the gap between micro-credit institutions and semi-arid borrowers is bridged. This chapter answers three questions- why the lineage becomes the basis for forming a group, why members agree to being led by a lineage leader, and how lineage leaders ensure that the sarpanch delivers loan monies. Through case studies, the second part describes how policy interacts with informal rules of governance to shape the allocation of loans, and why asymmetric loan-taking practices between members and leaders are sustained.

The Macro Context: From Economic Empowerment to Profit Generation

Micro-credit was a largely donor-driven strategy of economic empowerment throughout the 1990s, but in the 2000s, took the form of commercial banking by private and nationalized financial institutions (Montgomery & Weiss, 2011) and represents the movement of capital across space to seek a rate of return (Harvey, 2005), specifically the expansion of financial capital in geo-economic margins like the drylands. Watershed development delivers micro-credit through the Ministry of Rural Development's micro-

credit intervention *Swarnajayanti Gram Swarozgar Yojana* (SGSY) (Rural Self-Employment Scheme).

The work of microfinance, which is often promoted as a part of development policy, is not separate from the broader process of financialization of the economy (for a Turkish example, see Bakir & Önis, 2010; Weber, 2004). Micro-credit seeks to get the poor to establish financial agency and build links with banks (Weber, 2004), and the state and financial institutions' attempt to create a 'finance mentality' (Aitken, 2010) among the poor. Micro-credit delivered through watershed development signifies the twin attempt to craft an entrepreneurial class in the drylands and expand nationalized banks' economic returns from financial markets in rainfed areas.

Micro-credit is a component of the central state's monetary policy in India since at least 2003 (GOI, 2007b), when the Reserve Bank of India, India's federal bank introduced micro-credit to the lending portfolios of all nationalized banks. By March 2006, nationalized banks financed 224,000 micro-credit groups and disbursed 113.98 billion rupees; and by 2007, 560 nationalized banks including 48 commercial banks, 96 regional rural banks and 316 cooperative banks delivered micro-credit (GOI, 2007b).

Micro-credit's institutional arrangements are shaped by banks' priorities of maximizing financial returns. Commercial micro-credit is distinctly different from the Grameen Bank model of micro-credit consisting of four-five members per self-help group. The Rural Self-Employment Scheme has groups of 10-20 members which enables banks to raise higher collateral but dramatically increases transaction costs for borrowers. The Rural Self-Employment Scheme has a higher collateral-raising period (when borrowers deposit a monthly sum to demonstrate financial responsibility) of 18 months

rather than 12. While the monthly contribution is currently 30-50 rupees per month per member (one to two days' field labor wages) it is anticipated to be increased to 150-450 rupees per month. The National Bank for Agriculture and Rural Development, the Indian state's premier rural development banking agency, now emphasizes delivering diversified and repeated credit to earn continuous returns from lending rather than making a one-time injection of credit as income-generation schemes in the 1990s did (GOG, 2007; NABARD, 2007).

The shift in micro-credit's goal from economic empowerment to profit maximization has been accompanied by a scaling down of training (Mahmud, 2003) and 'soft' inputs to micro-credit groups such as financial literacy, information on schemes, and using micro-credit as a vehicle for political participation and human rights. Micro-credit's ascendance as a tool of profit-maximization has also entailed the removal of intermediary institutions, largely NGOs that facilitated group formation, trained members, conducted monthly meetings, oversaw accounting and used micro-credit as a forum to increasing women's participation in decision-making and transparency in the delivery of social services.

Bank-driven micro-credit deploys contractual employees rather than NGOs to link self-help groups to banks and diffuses banking to sarpanches and lineage leaders. The contractually hired social development expert is in charge of delivering micro-credit. Contractual employees act on behalf of the state but do not belong within it, and are given higher targets by the District Rural Development Agency for forming self-help groups compared to NGOs which implemented watershed development until 2007.

Contractual employees' legal distance from the state leads to intense monitoring of their productivity and they spend disproportionate time writing daily time diaries, monthly reports, quarterly reports and annual reports. Social development experts have to form 150 self-help groups in a five-year period and organize 1,500-3,000 women. NGOs were usually able to form no more than 100 groups and returned the remaining monies to the District Rural Development Agency. However, contractual employees face a 10 per cent cut if they do not meet group-formation targets each year. Because they are governed by weak authority structures at the district level, contractual employees are also more vulnerable to being deployed by the Block Development Officer for non-watershed development activities and being unable to protest this, because the Block Development Officer evaluates their productivity and disburses their pay checks.

Watershed development's operationalization is highly formulaic, outcome- rather than process-based and target-driven (also Baviskar (2004) and Chhotray (2004)). Contractual employees' performance is measured by numerically measurable and standardized tasks and productivity is measured through task completion, suppressing the time intensiveness of the process. This leads contract workers to choose the least participatory method to deliver micro-credit, namely through sarpanches who head the watershed development committee.

Watershed development mandates that the block-level team's social development expert train only groups' presidents and secretaries in a single session, impart no training to members, and not facilitate meetings except at loan-disbursement, with the result that social development experts rely extensively on sarpanches and group leaders themselves to conduct meetings and bank-related activities. Implementation rules are designed

precisely to expand sarpanches' authority. Heena, Limkheda block's social development expert elaborated:

The Swarnajayanti Gram Swarozgar Yojana mandates that a new self-help group start internal lending (*aantarik dheeraan*) within six months of its formation. If they don't start internal lending in six months their points (in evaluation rankings) get cut and they can't get their loan. Once a group starts internal lending, members phone me and ask me how to go about book-keeping. In some groups the members are educated (younger daughters-in-law) but the office-bearers- the secretary and chair (typically mothers-in-law) are not. But the secretary and chair insist that they alone will conduct all affairs. In that case, we have to conduct all of the group's business. Another rule is that every watershed must have 10 micro-credit groups. We can manage not more than two or three per watershed, given that we are in charge of an entire block and shoulder the burden of running illiterate leaders' groups.

In 2003, Limkheda's social development expert asked the sarpanch to gather all women from Mahipura and Himmatpur for an information session on micro-credit. Ward members and lineage leaders assembled their kin at the meeting held in Himmatpur. In Mahipura, the sarpanch only informed the Patels, Barias and Chauhans about the meeting, with information-sharing being shaped by the 'boundary of an acknowledged community' (Kabeer, 2002).

The social development expert informed at the meeting that the Swarnajayanti Gram Swarozgar Yojana delivered micro-credit at a monthly compounded interest rate of three per cent which was lower than moneylenders' rate of five per cent, and additionally,

delivered subsidized seeds, fertilizer and machinery. Many households met this with skepticism because of development schemes being accompanied by hidden costs such as demands of cash-contributions from beneficiaries, and the internal dynamics of groups. 'Rather than join a self-help group and get stuck, it's better to create our own livelihood.' These words of Lalita, a Baria woman summed up the fears of those who initially decided against joining a self-help group.

The District Rural Development Agency's mandate is to craft as many groups as possible knowing that a large proportion of groups break down due to internal conflict or the inability to contribute collateral over 18 months. In eastern Gujarat, micro-credit has expanded from covering 10 to 20 per cent of a community's households to covering 80 to 90 per cent of all households. A second round of village-level meetings was conducted in Mahipura and Himmatpur. The Taaviads (Adivasi) and Vikram, the Labda-Baria vote-broker were informed about the second meeting and attended it. The powerful Patels held a separate meeting for Bordi at Bharat's house.

The Politics of Inclusion in Groups

All the lineages that attended the meetings tried to form a group. Shankar had the greatest access to information on micro-credit and formed the first micro-credit group with Chauhans and well-off Barias. Settlement is dispersed with houses set amidst their fields. Each house is 50-100 meters from the other, and sub-clusters within a hamlet may be 100-300 meters from one another. Therefore face-to-face interaction is the greatest within the same hamlet. Fellow-hamlet inhabitants have repeated communication, multiplex relationships and trust, therefore the hamlet is the basis of forming a group.

Spatial proximity not only facilitates face-to-face interaction and trust, but also reduces transaction costs for monthly meetings, enabling leaders to remind members about a meeting, helping members gather, enabling leaders to go from house to house to collect deposits before a bank day, or facilitating members going to their leader's house to give their monthly deposit. While lineage-leaders and ward-members decide on the size of the monthly deposit and who will be included in a group, it is usually the wives and daughters-in-law of lineage-leaders and ward-members who perform the repetitive, labor-intensive task of gathering monthly deposits and depositing them in the bank. Micro-credit is delivered largely to women's groups as a strategy of women's empowerment, in an attempt to increase women's ownership of capital, because women's rights to land (and therefore wells) are deeply attenuated.

Shankar made his nephew and personal assistant Sagar's educated wife Geeta the chairperson of Saraswati, and his older wife Charu the secretary of the group. Sagar had been unable to find a job after college and Shankar had employed him as his personal assistant. Sagar's marriage to Geeta, a highly educated woman was made possible by the fact that he was Shankar's personal assistant. Sagar assisted Shankar with panchayat work, filling forms and traveling to government offices, and Shankar repaid Sagar by appointing Geeta as the village maternal and child health worker, giving her a government job. When I asked Geeta how she became Saraswati's chairperson, she replied, 'I wasn't even told about it. All the documents were ready for me to sign when I came as a bride and I signed them.'

The Baria leaders were initially unable to convince their kin to join a group but the same families clamored for a group when they saw the steady stream of rewards

Saraswati's members got, including seed kits and fertilizer. Swarnajayanti Gram Swarozgar Yojana's interest rate is only slightly lower than moneylenders' and group-based lending has high transaction costs. Those who formed groups did so not because of micro-credit's lower interest but subsidized seed kits and capital, which are precisely tools to offset the perceived drawbacks of micro-credit.

Among the 14 Taaviad families, seven migrated as wage laborers for more than six months of the year. While better-off Taaviads contemplated forming a group, only seven households could afford the monthly deposits while at least 10 were required to form a group. Micro-credit now has higher minimum monthly contributions, making it harder for the least well-off to participate. Taaviads who were permanent migrants were not even informed by better-off Taaviads about the group.

The Barias have the lowest level of irrigation of Mahipura's three largest lineages and formed only one self-help group. Three leaders govern this group jointly, reflecting symmetrical power among all three leaders- the two older lineage-leaders and Paar, the younger ward member.

Shankar attempted to form a second Chauhan micro-credit group but was constrained by the social development expert to form a multi-lineage disability group, in which Shankar made his cousin Babu and his second-cousin Ramsing's wife Madhu, both with minor disabilities, the office-bearers. Shankar told Vikram that he and the other Labda-Barias could join this group because the Labda-Barias lacked the numbers to form a group of their own. The Labda-Barias joined this group, but Vikram left after the first month, knowing that his interests would not be protected in a group controlled by the

sarpanch, and with the most powerful of the Labda-Barias leaving, the rest of the Labda-Barias left as well.

Micro-credit groups are unstable configurations shaped by micropolitics and power at lower scales. Vikram’s case shows that while *inclusion* in development is typically considered a sign of power, the ability to voluntarily *exclude* oneself from a group when one realizes that one’s interests will not be protected also denotes power. The Patel leaders Bharat and Veera formed separate groups because each leader in this wealthy lineage had sufficient perennial- and winter-well owning kin to form a viable group of 10 members. Veera, the senior Patel leader-cum-ward member incorporated two Nayaks, Sabur and his householder son with whom he had patron-client relations in his Patel group. Bharat and Veera made their wives presidents of their respective groups. Table 16 illustrates the composition of micro-credit groups in terms of lineage identity. Both the Chauhan groups comprised not only Chauhans but also neighboring Barias, and Veera’s group comprised not only Patels but also proximate Nayaks, lending credence to the idea that spatial proximity and trust rather than solely lineage homogeneity was the criterion of member-selection.

Table 16 Self-Help Groups’ Composition in Terms of Lineages

| Group leader | Leader’s lineage | Dominant lineage | Subordinate lineage | Total members |
|--------------|------------------|------------------|---------------------|---------------|
| Shankar | Chauhan | Chauhan (n=8) | Baria (n=3) | 11 |
| Shankar | Chauhan | Chauhan (n=8) | Baria (n=2) | 10 |
| Paaru | Baria | Baria (n=11) | - | 11 |
| Bharat | Patel | Patel (n=10) | - | 10 |
| Veera | Patel | Patel (n=7) | Nayak (n=2) | 9 |

Source: Household surveys conducted by the author in 2007

Leaders invited those living in proximity to themselves to reduce the transaction costs of monthly meetings, invited those who could afford to contribute funds every month, invited no more than 9-10 members rather than 20 people which is the size permitted by banks, which lowered transaction costs. Leaders controlled group size by telling kin that they could join a new group to be formed later. Lineage leaders generally invited well-off proximate kin to join their group. Self-help group membership had a positive and statistically significant correlation with motor ownership ($F=4.14$, $df=1$, $p=.04$, $R\text{-square}=.03$, $N=122$), high wages ($F=4.2$, $df=1$, $p=.04$, $R\text{-square}=.05$, $N=122$) and livestock ownership ($F=12.61$, $df=1$, $p=.0006$, $R\text{-square}=.93$, $N=122$), indicating the direct relationship between wealth and participation in micro-credit.

There were statistically significant differences between Kolis and Adivasis in access to micro-credit ($\chi^2=5.9724$, $df=1$, $p=.014$). While 45 Koli households comprising 43% of all Koli households secured membership in a micro-credit group, only two Adivasi households forming 12% of all Adivasis secured membership, likely due to Adivasis being fragmented across three lineages, each without the numbers to form its own group; Adivasis' absence from the village for long durations and lack of political representation, which was necessary to ensure that the sarpanch released their loan monies. Self-help group members belong largely to middle age-cohort of the thirties or older and play a prominent role in village life. As described in Table 17, the average age of self-help group members across the three Koli lineages ranges from approximately 33 to 36 years, and is higher for the Nayaks at 44.5 years. For all self-help group members taken together, age ranges from 19 years to 63 years, with the average being 34.5 years ($SD=9.5$).

Table 17 Self-Help Group Members' Age According to Lineage

| Lineage | Number of self-help group members | Average age | Standard deviation |
|---------|-----------------------------------|-------------|--------------------|
| Chauhan | 16 | 33.75 | 9.08 |
| Baria | 16 | 35.06 | 11.26 |
| Patel | 13 | 35.53 | 6.52 |
| Nayak | 2 | 44.5 | 9.19 |

Source: Household surveys conducted by the author in 2007

Comparing self-help group membership with proximity to a public drinking water source, which is a strong indicator of political capital and elected leaders' responsiveness to particular social groups (Miguel, 2004; Miguel & Gugerty, 2005), reveals significant association between access to micro-credit and drinking water. I created an index of drinking water access by combining the number of water sources (public hand pumps and private wells) each household had access to for daily needs, and the number of months a year each source provided safe water: wells are unusable in monsoon and winter-wells dry up from March to June, increasing reliance on handpumps, which are public goods. The index ranges from zero to seven in the direction of higher water security.

Proximity to hand pumps is a strong measure of political capital in the context of democratic decentralization (Besley et al., 2004). Hand pumps are public goods and their location is shaped by power because the panchayat installs hand pumps on the basis of mobilization by lineage-leaders and ward members. Powerful leaders have the panchayat install hand pumps near their house while less powerful hamlets' residents have to walk greater distances with heavy pots twice each day.

Eighty three per cent (39 out of 47) self-help group members had high drinking water access scores ranging from 5-7, reflecting access to a handpump less than 100 meters from their house; while only 65 per cent non-self help group members (49 out of

75) households had drinking water access scores of 5-7. Both micro-credit group membership and the installation of hand pumps flow through lineage leaders. Lineage leaders control membership in micro-credit groups by inviting those they have face-to-face, repeated and mutual interaction with, which are necessarily proximate households. Lineage-leaders also shape where a handpump is installed. This confirms both the spatialized nature of the structure micro-credit groups in the drylands due to dispersed settlements and lower transaction costs for borrowers living in proximity, and that micro-credit's locus of power is centered on lineage leaders who form groups.

Seventy per cent of all Chauhans, 33 per cent of all Barias and 46 per cent of all Patels became self-help group members. Each of the wealthier leaders formed his own group in an attempt to secure a bigger loan for himself. The Baria leaders, on the other hand, pooled their smaller resources and formed one group jointly. Table 18 lists the proportion of self-help group members in each lineage.

Table 18 Extent of Self-help Group Membership According to Lineage

| Lineage | Total Households | Member of a self-help group | Proportion of total in the lineage |
|---------|------------------|-----------------------------|------------------------------------|
| Chauhan | 23 | 16 | 69.57 |
| Baria | 49 | 16 | 32.65 |
| Patel | 28 | 13 | 46.43 |
| Taaviad | 14 | 0 | 0 |
| Labda | 4 | 0 | 0 |
| Nayak | 3 | 2 | 66.6 |
| Bhabhor | 1 | 0 | 0 |

Source: Household surveys conducted by the author in 2007

Micro-Credit's Governance in the Locality

The social development expert fills the necessary forms of the Rural Self Employment Scheme and gives group leaders a group register, account book, and

individual members' passbooks. Social development experts and banks are far more efficient in delivering group-level financial instruments than member-level instruments, and individual members' passbooks are usually delivered after 6-12 months, leaving members frustrated about the lack of a personal account of their deposits.

Limkheda's self-help groups have their bank account at the Bank of Bandibar, a rural bank in a quiet street in Bandibar, a small but bustling market town. The bank is an incongruous, low-set modern structure with a glass door, in contrast to the surrounding structures which are raised, with a narrow porch and long wooden windows that open into cool, dark, high-ceilinged rooms. At the end of 12 months of saving, the group withdraws its saving which is designated an 'internal loan'. Members use this fund for small expenses and repay this loan over the next six months along with their monthly deposit. After 18 months, the group becomes eligible for its first bank loan.

The social development expert trains the presidents and secretaries of all self-help groups in account-keeping, conducting monthly meetings, writing minutes, depositing money and maintaining records. The new micro-credit imparts training solely on financial aspects to meet banks' book-keeping requirements. The new credit is driven by banks' attempt to secure returns from their investment and group governance is delegated to authoritative leaders. Financial sector-driven micro-credit uses the rhetoric of women's empowerment for entrepreneurial ends- the Gujarat's government's bureaucrats urge self-help groups to change their 'worldviews, attitudes, beliefs and values' to participate successfully in ever-changing commodity markets (GOG, 2007).

This section describes why micro-credit groups are largely led by lineage-leaders. Reciprocity with the sarpanch, authority over group members, and the resources to host

bank officers when they visit the group are essential characteristics for group leaders. It is lineage leaders alone, and ward-members who are subsumed within this category that can perform all three functions. Reciprocity with the sarpanch ensures that the sarpanch releases loan monies. Lineage leaders check the sarpanch's power through their membership in the panchayat, influence over their lineage's votes and dispute-mediation. Lineage leaders govern lineage-members by resolving conflicts over property, marriage, violence and injury; govern access to shared resources, and can enforce members' deposit each month. Paaru, Baria lineage leader and dispute mediator describes how lineage-leaders mediate disputes:

DD: Do you resolve village-level disputes or hamlet ones?

SP: Hamlet-level- just among kin... marital disputes. If a woman says 'I don't want to live with him', or a man says 'I don't want to keep her' - we tell them the pros and cons of the situation and how much money it will take to obtain a divorce. We say, 'Why do you say that? This'll be your fine, and this is the amount you'll have to pay her.' If they still don't resolve their quarrel, they have to go to the police station. Otherwise the *panch* resolves it (*nikaal*) and that works.

DD: What qualities do you feel made you a dispute-mediator?

SP: I've done it before and people have agreed with my judgment... found it fair... so I've been asked to arbitrate again. I suppose because they appreciate my arguments. I guess they feel, 'He's speaking well, he knows what's customary (*vyavahaarik*), he's got the thinking and articulation right'.

DD: How do you have a sense of what the rules are?

SP: Intelligence! Experience. See: this side is saying this, that side is saying that. Then you have to allow your intelligence to decide what the right course is and how a judgment should be made. In a dispute we ask both parties what the trouble is. They tell us for instance that they have quarreled over land. ‘How?’ ‘He encroached on my piece while plowing.’ Then we measure the land on all sides and re-mark the boundaries. Then when we’ve resolved it, we get jaggery and gram (*gol-dhaana*) and make them restore amicus. When others come to know of it they approach us to resolve their conflicts as well. So your reputation as a leader (*agevaan*) keeps growing.

Arbitration and the ability to fine offenders within their own lineage gives lineage leaders latent power over lineage-members which they can activate to secure micro-credit payments. Referring to Shankar’s de facto leadership of her group, a member of Gayatri explained, ‘There is no one else who is capable of making people pay, no one else who can impose the rules’. Table 19 illustrates self-help group leaders’ leadership roles in the community. Shankar is village-wide dispute-mediator, sarpanch, village leader (*agevaan*) and development agent. Paaru, Baria leader resolves Baria disputes and is a ward-member who constrains the sarpanch. Bharat is a Patel lineage leader who governs his faction of the Patels and mobilizes resources from the sarpanch. Veera is senior Patel leader and ward member.

Table 19 Village-Wide Leadership Roles of Self-Help Group Leaders

| Group leader | Group Leader's Informal Roles | Group Leader's age |
|--------------|-------------------------------|--------------------|
| Shankar | Sarpanch, lineage leader | 45 |
| Paaru | Ward member, lineage leader | 38 |
| Bharat | Vote broker, lineage leader | 28 |
| Veera | Ward member, lineage leader | 46 |

Source: Household surveys conducted by the author in 2007

Lineage leaders are the wealthiest in their lineage with perennial wells, motors and diversified agriculture. Lineage leaders grow profitable crops like lentils and castor and sell cash-vegetables, have an evenly distributed income-flow and can make a temporary deposit on a member's behalf, are resident in the village and can host external visitors from the bank. Table 20 outlines self-help group leaders' wealth compared against that of their lineage. Asymmetries of wealth between lineage leaders and members facilitate lineage leaders' ability to organize micro-credit groups.

Table 20 Group Leaders' Assets Compared to the Average for their Lineage

| Group leader | Wells owned | Motor rights | Per capita livestock |
|--------------|-----------------------------|--------------|----------------------|
| Shankar | 2 perennial (1 late-winter) | 1 (0.31) | 1.77 (1.04) |
| Paaru | 1 perennial (1 mid-winter) | 0.33 (0.42) | 1.12 (1.08) |
| Bharat | 3 perennial (1 late-winter) | 2 (0.55) | 2.67 (1.28) |
| Veera | 1 perennial (1 late-winter) | 1(0.55) | 1 (1.28) |

Source: Household surveys conducted by the author in 2007

Note: Figures in brackets are average values for the lineage a leader belongs to

Micro-credit's institutional rules transfer banking functions to groups and impose the transaction costs of banking on self-help groups' presidents and secretaries who must monitor members' deposits, write accounts and travel to the bank to deposit money.

Lineage leaders meet transaction costs which strengthens their property rights to loans.

Transaction costs include those internal to the group, those with intermediary institutions and those with external actors.

Transaction Costs within the Micro-Credit Group

Coordination costs. Lineage leaders meet the self-help group's coordination costs such as deciding on the minimum monthly contribution, meeting venue and time. Groups formed at early stages such as Shankar's began with a small monthly contribution of 30 rupees, but newer groups realized that higher monthly contributions enabled securing a bigger loan. Therefore both Veera and Bharat mandated a monthly contribution of 50 rupees. Lineage leaders also decided on a meeting venue, and a lineage leader's house is already a focal meeting point for the hamlet, therefore holding a meeting at his house fits with customary norms of leadership.

Costs of gathering monthly deposits. Leaders emphasize that the internal costs of managing their group are far greater than the costs incurred in bank transactions. To make a bank deposit, leaders must secure all or most members' individual deposits. Chanda and Champa, the de jure leaders of the Baria group, go from door to door telling women to bring their deposit to either leader's house before a bank day so that they are not delayed on the day of making a deposit itself. Veera pays his members an advance 'reminder visit' so that members have their deposit ready the day he goes to the bank. Bharat ensures that his group's members come to his house on a designated meeting day to deposit the money. Making sure that all members contribute cash before the designated bank day is more important for less wealthy leaders like the Barias than wealthier ones like Geeta and Bharat who can fill in for a late-paying member with a temporary deposit.

Depositing money for late-paying members. Dryland households are cash-strapped and income has seasonal dimensions, with cash supplies being lowest in the monsoon sowing season from June-August due to expenses on school textbooks, seeds

and fertilizer coinciding then. However, bank deposits must be made every month. A leader's ability to make a temporary deposit of cash on a member's behalf is particularly relevant in this scenario. Lineage leaders with regular cash income from a government or NGO job, contracting, cash-crop farming or shop-keeping can deposit cash on a member's behalf and be reimbursed later.

Maintaining a written record. Micro-credit requires documentation of decision-making and monetary transactions, and eligibility for a loan is contingent on evidence of regular deposits, periodic meetings and deliberation on group loans. Lineage-leaders who are educated themselves or have educated kin appoint these individuals as formal group leaders to meet micro-credit's documentary requirements and present a detailed record so that bank officers approve a loan. Commercial micro-credit does not invest enough in training leaders to perform banking functions. However, groups are still evaluated on the basis of their documentation practices. Lineage leaders choose formal group leaders on the basis of their ability to read and write. Consider how self-help group members' average literacy, described in Table 21, compares to their leaders' education. Mean literacy among Baria self-help group members is 2.31 years, followed by Chauhan members with 2.25 years, the Patels with 0.15 years and Nayaks who are illiterate. In comparison to members, self-help groups' formal leaders are highly educated. Geeta has a bachelor's degree, Babu, the disability group leader has studied till the 10th grade, and Chanda and Champa, formal leaders of the Baria group have studied till the 9th and 10th grades respectively.

Table 21 Self-Help Group Members' Average Literacy According to Lineage

| Lineage | Number of self-help group members | Literacy | Standard deviation |
|---------|-----------------------------------|----------|--------------------|
| Chauhan | 16 | 2.25 | 5.09 |
| Baria | 16 | 2.31 | 3.62 |
| Patel | 13 | 0.15 | 0.55 |
| Nayak | 2 | 0 | 0 |

Source: Household surveys conducted by the author in 2007

Sanctions. Lack of timely payments is the single-most important cause for groups being disqualified from loans at the end of 18 months of saving. Members do not consider it their place to tell fellow-members to make contributions because members may be in the same boat themselves at a later point, but the burden of filling in with a cash deposit for a member falls on the leader and leaders feel justified in sanctioning members. Lineage-leaders may withhold the use of shared assets in case a member misses payments repeatedly, then stop taking deposits from a member altogether, effectively eliminating that member from the group, make all remaining payments on a member's behalf and purchase an asset in that member's name.

Transaction Costs with Intermediary Institutions

Negotiating loans with the sarpanch. Sarpanches are a part of micro-credit's credit-delivery apparatus. The sarpanch's cooperation is critical for a group when a bank officer comes to assess its viability because bank managers are from urban backgrounds and lack understanding of dryland property systems, wherein land records reflect undivided collective holdings and have several inheritors' names on a single title. The sarpanch verifies the size of individual landholdings through knowledge of kin relationships and helps bank officers verify each borrower's repayment capacity. The sarpanch clarifies bank officers' doubts and gives them verbal assurance that a group will

repay its loan. Monies are released through the signatures of both the bank officer and the sarpanch, who is a super-guarantor of groups in his panchayat; therefore groups are dependent on the sarpanch's cultural resources to secure loans.

Lineage leaders constrain the sarpanch to cooperate with them through their control over votes, joint dispute-resolution and shared membership in the council of elders. Lineage leaders are members of the council of elders which is more powerful than the sarpanch in governing communal life. Since Panchayati Raj was enacted in 1994, the sarpanch is designated the chief leader (*agevaan*) of the village, but often consults with ex-patels and lineage leaders to sanction offenders because this reduces his own costs of sanctioning. The sarpanch is subordinate to the dispute-mediation process and is subject to lineage leaders' and the patel's authority if he commits a wrong. Consider the words of Bhaga (BR), the Baria lineage-leader who co-founded the Baria self-help group:

DD: Are there times when the sarpanch doesn't heed the council of elders?

BR: No, the sarpanch won't do that.

DD: Is the sarpanch more powerful than the council of elders?

BR: No, he has to respect the council's verdict. These (lineage leaders) are people from every hamlet, they have defined the law (*kaaydo, kudrat*), and they have laid it down. He can't break the law.

Lineage leaders exercise countervailing power over the sarpanch through knowledge of his judgments in disputes. Lineage leaders maintain secrecy about the mode of resolution because leaders themselves may diverge in viewpoint but a single judgment must be passed. Dispute mediation is a counterbalancing institution that guarantees that the sarpanch delivers the bank loan, otherwise lineage leaders may refuse

to support a particular judgment of the sarpanch, refuse to assist him in mediating a serious dispute or call for fresh mediation in an old case stating that the sarpanch misjudged it. This leads the sarpanch to do extra favors for lineage leaders, including sharing information on questions that bank officers might ask on their visit and how to secure a high ranking on the social development expert's evaluation of the group.

Additionally, lineage-leaders constrain the sarpanch via ward-membership. Veera and Paaru, incumbent ward-members of Bordi and the main village respectively, re-contested their seats and won in the 2006 village panchayat election, but Shankar, who they partnered with as their sarpanch-candidate, lost. Veera and Paaru were now in the awkward position of being ward-members in Shankar's rival Tersing's panchayat who controlled their loan. However, as the sarpanch, Tersing required Veera and Paaru's approval of his proposals to implement schemes. Both Paaru and Veera quickly forged a cordial relationship with Tersing and started attending the new panchayat council's monthly meetings, which opened channels of communication between them and the new sarpanch for future action on micro-credit.

Simultaneously being members of Mahipura's council of elders, Veera and Paaru were powerful enough to fend off Shankar's claims on old loyalties. When Paaru started meeting Tersing in a personal capacity at Tersing's house from January 2007 onwards and Shankar accused Paaru of turning over to Tersing, Paaru replied unfazed that Tersing was the new sarpanch, therefore he had to petition to him for the Barias' needs.

Independent links with the panchayat. Micro-credit necessitates lineage leaders forming links with the panchayat to be thoroughly familiar with loans' terms, particularly because policy guidelines change constantly, new loans are introduced and old ones

discontinued, and the subsidies on different loans may change. Ward members get updated information at the monthly panchayat meeting and can legitimately ask the panchayat secretary to read changes in guidelines and clarify their finer points.

The panchayat secretary demands bribes from people for small tasks like notarizing documents. The secretary comes to the panchayat office just once a week and is unresponsive to ordinary people's requests for information. Most people visit the secretary only to pay annual taxes or record a birth or death. In reply to my question about whether she visited the panchayat secretary for information on schemes, Kamla, 35, a Chauhan woman remarked, 'Yes, we go to the panchayat secretary. But he tells us on our face: "Give me five-six thousand rupees. Whoever gives more money takes the scheme." If all he has to do is sign a document he says, "I'm sure you can spare 10-20 rupees."'

The more fruitful meetings are between the secretary and the wealthiest cash crop farmers who pay the secretary bribes to secure subsidized resources for low-income families that they are not eligible for, as one of Mahipura's only two men who identified themselves as cash-crop farmers did, securing monies for well-deepening and house-expansion. While the panchayat secretary may oppress ordinary people, ward members escape this privation because of their office and can secure information on development from the secretary. This enables ward-member to lead micro-credit groups.

Transaction Costs with External Actors

Transaction costs with the bank. Self-help groups have to deposit funds in the bank for 12 months, withdraw this 'internal loan' and return this sum over the next six months, all entailing periodic trips to the bank. The Bank of Bandibar is 15 kilometers

from Mahipura and each round-trip costs 10 rupees by jeep, totaling 180 rupees over the 18-month period, the equivalent of one member's six months' deposit. Traveling to the bank is a lesser financial burden on lineage-leaders who are among the wealthiest people in their villages. Two leaders, Bharat and Shankar even own a motorcycle. Other leaders walk or cycle to the bank to save on travel costs. The bank's hours are from 10 am-1 pm and from 3 pm-4 pm, necessitating that leaders adjust daily time guided by sunrise and sunset to the bank's clock-time. Landless households working as permanent field laborers and migrant laborers cannot travel to the bank every month. This task is best performed by those permanently resident in the village, such as wealthy lineage-leaders.

Groups also have to host bank officers when they come to assess a group's capacity for repayment. Leaders identify their houses as the most suitable for meetings with external actors. Through such artifacts as chairs for visitors, a table and the ability to provide expensive refreshments like milk tea, lineage leaders can demonstrate that they are connected to the broader world of economic advancement and are suitable candidates for receiving loans for commodity production.

Transaction costs with state actors. The social development expert is assigned high targets for forming self-help groups and does not visit newly formed groups after their first two or three meetings. Because of poor investment in training leaders, groups invariably attempt to persuade the social development expert to come to the village for subsequent meetings to update records. Lineage leaders can afford to travel to Limkheda to persuade the social development expert to come to the village.

While members grapple with meeting month-to-month deposits, leaders strategize to make the group eligible for a loan by familiarizing themselves with the District Rural

Development Agency and bank's criteria for judging a group's quality. The social development expert ranks group on the basis of their book-keeping, record of meetings' minutes and clarity about how they plan to put their loan to a productive use. Lineage leaders talk to the social development expert in an informed way and lay out a roadmap of what commodity they will produce with their loan.

The social development expert's assessment of each self-help group involves observing group meetings and savvy leaders demonstrate their groups' discipline at these meetings. I realized the performative quality of meetings while attempting to interview Masuri, Bharat's wife and the de jure leader of his group 'Lakshmi'. I rarely found Masuri, 32, at home during my visits to her house because she worked in their perennially irrigated fields every day; weeding, harvesting and watering food-crops, fodder-crops and cash-crops. I kept trying to meet Masuri for several days and found her at home one mid-morning. I began to ask her about her experience with micro-credit, the group's internal relationships and her vision for her the loan. I had barely introduced the topic when Masuri asked me preemptively, 'Do you want to hold a meeting of the group? I'll fetch the women.' Before I could protest, Masuri strode out of the house to inform her sisters-in-law and aunts-in-law to assemble at her house.

Masuri assumed that I represented the Rural Self Employment Scheme, knew the social development expert and District Rural Development Agency officers, and would report to them on her group's performance. Micro-credit represented 18 months of labor for Masuri. Masuri returned in less than 10 minutes and pulled new plastic chairs into the verandah, typically commissioned for powerful external visitors like bank officers, development specialists and Forest Department staff. Nine women arrived in another ten

minutes, no mean feat for having to be fetched from grazing, working in the fields, collecting firewood, fetching water, tending to cattle, cooking and taking care of infants. NGOs and government officers often complain that they arrive for a village meeting at a designated time only to find that none of the villagers had arrived. But by proving to an unexpected visitor that she could command her group to gather for a meeting when a development actor visited, Masuri demonstrated her group's discipline and commitment to making monthly contributions. The meeting performed 'work' or labor of showing Masuri's authority over the group's members and presenting ideal development subjects eager and willing to practice thrift-and-lending.

Unlike meetings in other villages that I had attended where self-help group members came dressed in the formal attire of polyester saris, the women were dressed in their 'home' clothes- a cotton underskirt and half-sari and had obviously been interrupted from work. Masuri appeared to have told them that this was a surprise evaluation visit. Masuri strove to make up for this shortfall in performance by grabbing a heavy tarpaulin sheet from the inner room of the house for the women to sit on.

The tarpaulin sheet is a characteristic artifact of participatory meetings conducted by development agencies in an attempt to increase collaborative decision-making in development projects. The heavy black sheet is used at public meetings at schools, panchayats or under the shade of a tree to accommodate large numbers of people for deliberative proceedings. The tarpaulin sheet is delivered through the National Rural Employment Guarantee Act (NREGA), the world's largest public works program, which mandates that work sites have a comfortable resting place for workers to take breaks during their eight-hour work shift. Every activity budget includes funds for a tarpaulin

sheet for this purpose. The National Rural Employment Guarantee Act is implemented by the panchayat and administered by the sarpanch.

Like other interventions, the National Rural Employment Guarantee Act is also a source of patronage, and Shankar delivered funds to Bharat through the National Rural Employment Guarantee Act during his tenure as sarpanch to purchase cement, concrete, tarpaulin and pay wages for a dam. Lineage-leaders, development agents, vote-brokers and ward-members who organize activities retain the National Rural Employment Guarantee Act's materials which constitute higher-level patronage to them from the sarpanch. Leaders often usurp the costly tarpaulin sheet (costing upward of 5,000 rupees), as Bharat had done as well.

The tarpaulin sheet is a ubiquitous marker of both development brokerage and participatory events. But even as Masuri unfolded the heavy sheet, the women instead perched on fertilizer sacks and grain bags lining the verandah as they would have during an informal visit to her house. Despite the flaw in the performance wherein members did not sit on the 'participatory' tarpaulin; Masuri had successfully assembled all members for a meeting and demonstrated that hers was a disciplined group. Masuri did what is well-documented in the anthropology of development- present her group members as 'ideal' development subjects (Baviskar, 2007; Ferguson, 1990; Li, 2007) who will do their part to make micro-credit a success and want what micro-credit has to offer.

Leaders do the work of 'translating' (Mosse, 2004) programmatic guidelines into practical actions so that tangible benefits can be secured, and in return, leaders feel justified in controlling loans and shaping their distribution. Members accept lineage leaders' control of leadership because lineage leaders have reciprocal ties with the

sarpanch, are familiar with micro-credit's rules, and can sanction members. A group's success in becoming eligible for loans is shaped by lineage leaders' resources to meet both transaction costs within the group and external costs between the group and the bank, the sarpanch and the social development expert.

Transaction Costs, Asymmetries and Property Rights

The Swarnajayanti Gram Swarozgar Yojana delivers both small loans for milk livestock, irrigation motors, electric generators and threshers worth 15,000-20,000 rupees and large loans worth 200,000-300,000 rupees for tractors, food processing units, organic manure manufacturing units and spice-dehydration units. Small assets like livestock and motors carry a 25 per cent subsidy while large assets like tractors and agro-manufacturing units have a 50 per cent subsidy. As an incentive to self-help groups to continue saving for 18 months, the District Rural Development Agency channels subsidized seed kits when groups complete 12 months of saving.

While a transaction costs framework enables explaining why lineage leaders organized micro-credit groups in Mahipura, interactions between members and leaders are also political, and asymmetries of wealth, information and property rights between leaders and members come to the fore when the group moves from the saving to the internal lending and loan-taking stage.

The dynamics of loan-taking alter bargaining relations between self-help group leaders and their members. The distribution of credit within groups is shaped by the distribution of power between the leader and members. Intra-group power relations shape whether a loan is taken for divisible capital like livestock or irrigation motors for each member or indivisible capital like a tractor which only the lineage leader can afford. The

wealthiest leaders- Shankar, Bharat and Veera wanted a single large loan for themselves for a tractor or agricultural processing unit while the less wealthy Baria leaders could afford only small loans for themselves, and decided on a buffalo-loan for each household. Large-scale assets fit wealthy lineage leaders' resource endowments while less well-off members prefer small capital. Tractors are scarce in Dahod and are used by the wealthiest leaders to earn rental income by ploughing fields. Tractor rental charges are 400 rupees per field and tractor owner-operators earn substantial incomes in the peak pre-sowing weeks in June, July and November.

By 2008, two groups in Mahipura secured loans and both displayed asymmetries in loan-taking between their leaders and members. Members could do no better than accept these terms because of asymmetries of information and control over the group's passbook and rights to make bank transactions. Banks list only the secretary and chairperson's name in the group's passbook while members' names are listed in the village-level register which is not granted the status of a legal document. Banks vest the power of making deposits with leaders alone rather than allowing any member to deposit cash on the group's behalf. The bank does not make entries of deposits in members' personal passbooks, instead delegating this to the leader. This buttresses leaders' property rights over loans, attenuates members' claims to loans, and weakens members' ability to ensure intra-group equity in loan-delivery.

Beyond formal rules, lineage leaders strengthened control over loans by meeting intra-group transaction costs, banking costs and the costs of interacting with external actors. To minimize lending costs, banks maintain their distance from borrowers and interact only with leaders except during the single moment of disbursing a loan. Banks

try to minimize costs by lending locally and lending to borrowers they know rather than those they do not know (Banerjee, 2003). In the case of micro-credit, banks delegate information costs to leaders who know borrowers' repayment capacity and who select borrowers living close to themselves to form a group.

Moves and Countermoves in the Saraswati Micro-Credit Group

The loan-making stage was marked by conflict in the case of both Saraswati and Gayatri, the first two groups that Shankar formed and which were the first to secure loans. The loan is an external stimulus that altered the dynamic between the leader and largely Chauhan members, wherein members felt entitled to a loan in exchange for saving their money in the group's bank account, while Shankar attempted to secure the largest loan for himself on the basis of meeting transaction costs, and because it was costless to usurp a loan. Shankar secured loans by co-opting both Saraswati and Gayatri's de jure leaders, sharing generous benefits with Geeta and Babu, Saraswati and Gayatri's leaders respectively, in exchange for their cooperation.

Saraswati has all the qualities of a successful micro-credit group. It is led by the sarpanch and its leader Geeta is the most educated woman in Mahipura. The group comprises well-to-do Chauhan and Baria women inhabiting the powerful Chauhan hamlet. Saraswati consists of an 'inner-circle' of Chauhans close to Shankar who share habitual interaction with Shankar's household. Sociality with the sarpanch's family is 'infrastructure' for the inner-circle like the economic infrastructure of roads, bridges and telecommunications (Elyachar, 2010) which provides an information flow on schemes. The 'outer-circle' comprises three Baria families and more dispersed Chauhans, including my host Saroda.

When Saraswati's members completed 12 months of saving, the inner-circle members including Shankar's wife Charu, Geeta the group leader and their immediate neighbors traveled to the Limkheda watershed development office to secure seed kits. The commercial price of a seed kit is 600 rupees while self-help group members get discounted kits for 300 rupees. Charu and Geeta also secured fertilizer loans, likely using outer-circle members' loan quotas. The outer-circle members learnt about the inner-circle's trip when they returned and felt cheated, being close kin and having always assisted Shankar, their lineage leader in his annual rice transplantation, wedding feasts, and voting for him.

This incident drove a wedge between the outer-circle and inner-circle. In the meantime, members neither received their personal passbooks nor had group leaders make entries in them. The outer-circle members demanded a written record of their deposits in their personal passbooks. Geeta told Radha, 30, an outer-circle Baria who deposited a total of 1,050 rupees that her saving amounted to only 700-800 rupees. Radha recounted later, 'My money hasn't grown, it has depleted in the self-help group. It would have been better to keep it in a tin can in the kitchen without earning any interest.'

Angered by what appeared to be a siphoning of their savings, Saroda, Radha, Saroda's Chauhan neighbor Kamla and others demanded that their passbooks be returned to them. A few days later Geeta told them that the passbooks were missing. This amounted to total loss of control on members' part. In retaliation, at the end of 12 months of saving, when the group withdrew its deposit after 12 months for internal lending and each member took 500 rupees, the outer-circle returned only 200-300 rupees to compensate for their losses. Saroda, Kamla and Radha stopped depositing money in the group account from May

2006 onwards, telling Geeta and Charu that they could not possibly contribute money without obtaining a record of their deposit. This had the paradoxical effect of eliminating these members' ability to make further claims on the group, and Shankar started depositing monies on these three members' behalf, appropriating their share of loans.

Shankar had gathered information on loans and subsidies and decided on buffalo-loans for the group for cash-milk production for the cooperative dairy. The group consisted of 11 members and each was eligible for one loan-buffalo. Shankar decided that group-members' husbands would travel to Mehsana district to select buffaloes from markets in Mehsana famous for the high-yielding Mehsana breed. One week before the Mehsana trip, Shankar told Saroda, Radha and Kamla that their purchase would require a down-payment of 5,000 rupees for sundry travel expenses and fee to the buffalo-seller. This figure amounts to one-fourth the price of a buffalo. The three women were taken aback because the loan covered the full amount of cash required to purchase a buffalo. The women said that they could not afford this sum. Shankar returned the next day quoting a reduced figure, saying that it would take 3,000 rupees to process the buy, and whittled the sum down to 1,000 rupees on the eve of the Mehsana trip. Inner-circle Chauhans as well as Baria families close to the sarpanch were not asked to pay any fee and this appears to have been a deliberate move by Shankar to discourage the outer-circle members from purchasing a buffalo. Saroda and Radha opted out of the buffalo scheme. Kamla paid 1,000 rupees to get her buffalo but stopped socializing with the inner-circle after the men returned from Mehsana with buffaloes. Table 22 outlines the distribution of loans within Saraswati.

Table 22 Loan-Taking by Saraswati Self-Help Group Members, 2004-2005

| Loan-taker's identity | Loan purpose | Amount (with subsidy) |
|---------------------------------|--------------------------------|--------------------------|
| Sarpanch | Seeds, fertilizer, 4 buffaloes | 74,000 |
| Sarpanch's brother | Seeds, fertilizer, buffalo | 19,500 |
| Secretary, inner-circle Chauhan | Seeds, buffalo | 19,000 |
| Inner-circle Chauhan | Seeds, buffalo | 19,000 |
| Outer-circle Chauhan | Buffalo | 18,000 |
| Outer-circle Chauhan | Buffalo | 18,000 |
| Inner-circle Chauhan | Buffalo | 18,000 |
| Baria Neighbor | Buffalo | 18,000 |
| Baria Neighbor | - | - |
| Outer-circle Chauhan | - | - |
| Outer-circle Baria | - | - |

Source: Household surveys conducted by the author in 2007

Shankar secured four buffaloes for himself using other members' quotas. Shankar is illiterate and relied on Geeta to do the group's accounts, and secured the finest buffalo for Geeta, account-keeper and a key agent in presenting the group's activities as equitable. Access to resources was not shaped by kinship alone but qualitative differences in sociality, and Kamla, Saroda, Radha and others in the Chauhan hamlet had felt this keenly. Kamla said:

Every time we ask for our passbooks or information, the inner-circle members say, 'Come, let's have a meeting.' But there is no talk of who is poor (*gareeb*) and who should get benefits. Why should we go to meetings just to hang out?

Kamla challenged inner-circle leaders' attempts to include them nominally through formal 'meetings' while in fact erasing distributional issues from the agenda of these meetings and holding meetings only when outer-circle Chauhans challenged them. Saroda, ever-vocal said, 'Do they think that resources are only for them and not for the poor?' Ramsing, another member's husband said, 'Those who command information take

resources and the poor don't get anything. They share benefits only with those who they have social exchange with.' I was struck by the use of the term 'poor' by these well-off Chauhans who are better-off Kolis. Limkheda's predominantly Koli villagers, many of who have lift irrigation and are cash crop farmers, are used to calling other groups in Dahod poor. Calling them poor (*gareeb*) is a major way that Kolis assert dominance over Adivasis and Dalits in Dahod. The term 'poor' is pejorative, signifying not just material hardship and powerlessness but lack of citizenship- lack of one's interests being regarded in the public good and exclusion from norms of civility accorded to a fellow-being.

The least well-off families do not refer to themselves as 'poor' because of its association with subjection and because their indigence is evident in infertile plots, homesteads devoid of cattle and huts without grain storage urns (*kothis*) because they produce no grains to store. The least well-off households are instead preoccupied with migration circuits, keeping their children in school and maintaining social standing in their clan by contributing *chaandlo* to the few fund-raising feasts that they are invited to.

Kamla, Saroda and Ramsing are upwardly mobile Kolis. Kamla occasionally leases in land from farmers in economic distress in exchange for cash and grows cash-crops on leased land. Ramsing runs a medium-sized provision store in the village and earns a monthly income of 1,500 rupees. Saroda and her husband are saving up migration wages to build a new stone house, a sign of upward mobility in Limkheda, in anticipation of securing a bride from a well-off family for their son.

Deploying the term poor is a power move by well-off Chauhans to suggest lack of entitlement, social exclusion and othering, and exhibited skilled use of the language of deprivation by powerful actors to assert being unfairly excluded from development, even

when the same exclusion is enacted towards Adivasi Nayaks and Taaviads is derecognized. Identities are ‘mutable ongoing productions’ (Massey, 2004) deployed to secure resources. Kamla, Saroda and Ramsing, all relatively well-off Kolis, deployed the term ‘poor’ as a trope of powerlessness with respect to inner-circle members. Being poor meant being discriminated against despite being kin or neighbors, lacking decision-making power and being kept in the dark about collective resources. By donning the category of ‘the poor’, outer-cluster Chauhans voiced different principles by which their group’s loans should have been distributed.

Saraswati’s outer-circle members punished the sarpanch both within the framework of micro-credit and in the multiple arenas in which members and the sarpanch had relations. Kamla and Radha cast blank votes in the panchayat election in December 2006 instead of voting for Shankar as would be expected of them as his kin. Kamla and Saroda withdrew their labor from Shankar’s annual rice-transplantation in which all Chauhan women participated as an act of loyalty to their *agevaan*. Radha, who lost 700 rupees in monthly deposits in the Saraswati self-help group, stopped interacting with Shankar’s family although as one of only three Baria households in the Chauhan hamlet, living in proximity to the Chauhan leader was a matter of great pride to her.

Moves and Countermoves in the Gayatri Micro-Credit Group

In an attempt to make development policy more inclusive, the Rural Self Employment Scheme emphasizes forming disability groups, marginalized castes’ groups and landless households’ groups in addition to women’s groups. Shankar formed a second Chauhan group under the guise of creating a disability group. This group, ‘Gayatri’ comprised two Barias, two Chauhans and two Patels with minor disabilities.

Non-disabled members were subsequently added to the group. Babu, 40, Shankar's first-cousin was made the group's secretary, and Madhu, 26; Shankar's second-cousin's wife was made the chairperson.

Babu has close ties with Shankar because he is the oldest of three brothers and represents his two brothers in the village assembly, as is customary in Mahipura, where only the oldest brother from each family attends the assembly. Many a younger brother resents this informal rule which prevents him from accessing information on schemes and subsidies from the sarpanch, and enables the oldest brother to appropriate patronage. In his role as a panchayat assembly participant, Babu also contributes to legitimizing the panchayat's decisions.

Shankar's house was my first abode in Mahipura and I was struck by the gleaming red Mahindra tractor, Mahipura's first, standing conspicuously in his backyard. Shankar said that he bought the tractor through a bank loan which had a subsidy so that its cost was not the market price of 400,000 rupees but 200,000 rupees. Three months later, through part-derisive and part-joking references by Gayatri's members, I learnt that Shankar had purchased his tractor through Gayatri's loan.

The Chauhans refer to Gayatri as 'Babu's group', tacitly disowning the group and denying their membership in it. Gayatri's variegated story was pieced together from conversations with its de jure Chauhan leaders, Shankar, the group's new members and its former members. Gayatri initially consisted of 11 members; two Patels, five Labda-Barias and four Chauhans. Vikram, the Labda-Baria political broker had initially joined this group and attended its first meeting- the Labda-Barias did not form their own group, knowing well that Shankar would not cooperate with them in disbursing their loan.

Vikram left the group after one month, considering it unviable because of Shankar's control of the group, and Babu's acting at Shankar's behest. Once the most powerful Labda-Baria leader left, the remaining Labda-Barias left the group as well.

Babu told me that old group 'broke up' and Babu and Shankar crafted a new group consisting entirely of Chauhans. However, Chauhan, Patel and Baria members alike had a different story to tell. Members reported that Babu did not keep an account of their deposits, did not make entries in their passbook and demanded more cash from them, reportedly to bribe government officials. One member described his siphoning of funds with the tongue-in-cheek comment 'He told us that the government (*sarkaar*) needed money to eat, so we gave him money for the government to fill its belly and for him to fill his belly.' Chauhan members inhabiting the fringes of the village said that their names were removed from the group's roster and new names were added.

Babu, a fluent penman wrote in the group's file that the Barias and Patels were errant in depositing their money and were barred from membership due to non-payment. This provided justification for forming a new group. Shankar and Babu used documentary practices to materialize a particular reality of their group to expel non-Chauhan members, after which Shankar added new Chauhan members. Many Chauhans did not even know that their names had been added. In return for his cooperation, Shankar turned a blind eye to Babu siphoning 450 rupees.

I met Babu late one afternoon while he was building a new house, using the final weeks of summer to set up the roof. Babu produced Gayatri's register and showed a meticulous record of its meetings. Minutes were noted for each meeting, points deliberated upon and even 'divergence' within the group transparently displayed. The

group's other members insisted that the group in fact held no more than three meetings. Babu told me frankly that he took the register to Shankar's place to write the minutes, and records were collaborative texts between Babu and Shankar.

After liquidating the old group, Shankar singly deposited most of the collateral so that the group did not become ineligible for want of deposits. Shankar secured a tractor-loan worth 300,000 rupees through Gayatri. In return, Shankar helped Babu, Madhu the president, and new members secure livestock-loans, securing his kin's support for his tractor loan. Gayatri's loans are outlined in Table 23.

Table 23 Loan-taking by Gayatri Self-Help Group Members, 2004-2006

| Loan-taker's identity | Loan purpose | Amount (including subsidy) |
|-----------------------------|--------------|----------------------------|
| Sarpanch | Tractor | 500,000 |
| Group Secretary | Buffalo | 18,000 |
| Secretary's younger brother | Buffalo | 18,000 |
| Group President | Seed kit | 18,600 |

Source: Household surveys conducted by the author in 2007

Micro-Credit's Impact on Credit Equity

Microfinance in the 2000s is constituted by financial institutions' imperatives of expanding their returns by lending to the poor (e.g. Aitken, 2010; Elyachar, 2002; Young, 2010). Rural micro-credit is created through a neoliberal process of regulation that privatizes credit-delivery while deepening borrowing cost, risk and uncertainty. Micro-credit is an instrument of integrating the drylands with financial markets, and is centered on forming self-help groups that are viable from commercial lenders' standpoint. While micro-credit seeks to maximize credit coverage (Weber, 2004), it seeks it for *all the non-poor*. Commercial microfinance's imperative is to maximize credit to those best able to use it- those who own wells and already participate in cash crop production. Micro-credit

deepens already existing inequalities, comprising a deliberately institutionally weak channeling of monies to the wealthiest borrowers in the guise of financial empowerment.

Swarnajayanti Gram Swarozgar Yojana loans are tied to purchasing large capital for commodity production such as tractors, organic manure production and livestock, with the loan ranging from 18,000 rupees for a buffalo to 500,000 rupees for a tractor. The poor cannot afford such large loans for purchasing capital that they cannot even use productively. The credit needs of the poorest households in rainfed areas are for consumption expenses, but micro credit expands credit to wealthier groups for commodity production while allowing the least well off to fall into deeper debt traps.

Micro-credit in semi-arid communities is explicitly centered on commodity production rather than meeting consumption needs, a finding corroborated by Bolivian evidence on micro-credit (e.g. Navajas, Schreiner, Meyer, Gonzalez-vega, & Rodriguez-meza, 2000). While micro-credit can fill the gap between marginal cultivators' and landless households' need for micro-loans to meet consumption expenses, the Swarnajayanti Gram Swarozgar Yojana's loans are tied to purchasing capital for commodity production, and constitute the upward distribution of state-delivered credit to the wealthiest entrepreneurial households.

While 70 per cent of Dahod's population is Adivasi, only 50 per cent of the Bank of Bandibar's micro-credit groups are Adivasi; and though only 30 per cent of the population is Koli, 50 per cent of Bank of Bandibar's groups are Koli (DRDA, 2007). Out of a total of 1,939 self-help groups formed in Dahod district during 2002-2007, 782 groups or 40 per cent did not qualify for a loan after completing their internal lending,

656 self-help groups or 34 per cent qualified for only seeds and fertilizers, and only 501 or 26 per cent qualified for major loans (DRDA, 2007).

Micro-credit in the drylands is far from micro, particularly since the 2000s when micro-credit has shifted to a commercial banking strategy implemented by private microfinance banks, conventional banks with micro-credit subsidiaries, and nationalized banks that have introduced a micro-credit component in their operations. The loans delivered through the 'new' micro-credit to the tune of 500,000 rupees for tractors, dehydration units, food-processing machinery and power generators are not micro even by well-off Kolis' standards.

Loan disbursement was highly skewed among a total of 1,939 self-help groups formed by the District Rural Development Agency in Dahod during 2002-2007. 1,500 people received a total of 48,000,000 rupees or 32,000 rupees per borrower for livestock-loans; 1,000 individual borrowers received 20,000,000 rupees or 20,000 rupees per borrower for irrigation motors; 1,040 individual borrowers received a total of 40,430,000 rupees or 38,875 rupees each for an income-generation activity; and just 114 borrowers received a total of 4,858,000 rupees or 42,614 rupees each for an industrial activity (DRDA, 2007).

Far from being a strategy of making credit accessible to the poor, micro-credit replicates a pattern of institutional lending well-documented in the literature on credit, namely that poor borrowers face higher costs for borrowing than wealthier borrowers (Banerjee, 2003). Banks design micro-credit rules and financial institutions have disproportionate power to define the terms of banking, including banks' own absence from group-level governance. A range of scholarship suggests that microfinance

institutions' devolution of monitoring costs from banks to leaders imposes financial burdens on leaders and leads them to appropriate resources (e.g. Mahmud, 2003; Mayoux, 2001; Rankin, 2002). Micro credit signifies 'diffusion of self regulatory modes of governance' (Sharma, 2006) beyond the bounds of the state, signifying state divestment of governance and the 'governmentalization' of private actors. The 'responsibilization' of entities such as self-help groups is aimed at governmentalizing society with a parallel degovernmentalization of the state (Sharma, 2006).

Lineage leaders steer the group through a lending process which imposes more conditionalities on poorer borrowers than wealthier ones (Field & Pande, 2008) including a long gestation period, the imperative to form a group and calculate interest. Leaders are able to appropriate loans because of deliberate erasure of oversight on banks' and the market-based state's part, which are committed more to returns on investment and commercial-input delivery for commodity production respectively than credit equity. Creating rules that require group leaders to be accompanied by a different member for each transaction with the bank, and requiring that monies be withdrawn and deposited with more than one person's signature can increase ownership and prevent skewed allocation of credit within groups. Giving members' personal passbooks legal backing is critical in checking leaders' power and enabling ordinary borrowers with the poorest access to fair credit access micro-credit.

At the same time, most households in Mahipura desired micro-credit by the time watershed development's implementation was well under way, seeking smaller loans and micro-credit's attendant rewards such as subsidized seed-kits. I suggest that this is because micro-credit builds a new kind of citizenship instrumentalized through monetary

transactions with the state. Micro-credit is a reversal of the state's attitude to the rural poor- from regarding them as lacking industry; it now considers them as bankable subjects. The citizenship bestowed by micro-credit needs to be seen in light of historical and contemporary experiences of semi-arid communities in relation to the state. The state is experienced in rainfed areas both by its absence during citizen distress and its overwhelming presence in ways that signify violence and disenfranchisement. The state is absent during robberies, cattle theft, murder and grain raids during the rainfed cultivation season when impoverished subalterns whose food reserves have been exhausted in summer venture forth to draw upon the wealth of well-owning cultivators. The state is absent during communal violence against Muslims and Christians in rural and tribal areas, a periodic occurrence in Gujarat since the mid 1990s where Hindu nationalist organizations deploy Kolis and Adivasis as their foot soldiers in religious violence (Lobo, 2002; Shah, 2002b).

However, the state is overwhelmingly present in other ways in rainfed areas. The state is pervasive in sanctioning villagers for entering village forests for timber, fuelwood and fodder; for demands of bribes for delivering development and human services; and in the architecture of Indian development policy with terms of trade of between industrial and agricultural commodities explicitly biased in favor of industry (Chakravarty, 1987), which is discussed in greater detail in chapter 5.

In contrast with these everyday practices of the state, micro-credit deepens economic citizenship, signaling the state expanding citizenship for dryland communities hitherto excluded from circuits of institutional finance, as well as promising future citizenship for people through capital ownership. As evidence from Mahipura shows,

some members condone leaders' loan usurpation because they hope to secure future loans, because the new micro-credit promotes repeated lending. Despite being shot through with conflict and even loss of monies for members, micro-credit is widely desired because of the vast majority of dryland households hitherto being excluded from institutional finance delivered by nationalized banks.

This chapter focused on the organization of new financial markets in the drylands through the interaction of political society actors, commercial rural banks and the policy implementation rules of a neoliberalizing state. The next chapter focuses on the social and political organization of commodity markets, the extension of capital for commodity production through loans which are effectively production contracts, the way contracts alter commodity-producers' sovereignty, and the role of economies of scale and the political process of price-setting in shaping commodity producers' returns from cash-crop production and the distribution of gains across producer-categories.

6. The Politics of Markets and of Value in High-Value Commodity Production

Linking the poor or ‘the bottom of the pyramid’ (Prahalad, 2009) with markets to improve their quality of life has emerged as a major development strategy among firms, donor organizations and national governments in recent years. In the drylands, this has taken the form of a policy thrust on agro-processing (GOI, 2008), dairying and marketing of dairying products, horticulture and agroforestry (GOI, 2007a).

Semi-arid communities depend critically on the market for survival, including both the labor market and agricultural market. A majority of households participate in labor markets in the construction and infrastructure sectors. A significant proportion of households sell produce for one to three months of the year, and cash-crop farmers all year round. Dryland producers sell commodities in competitive markets at market-towns called *haat* and the wholesale district market called *mandi*. Watershed development has identified milk as an optimal high-value commodity for the drylands because of the centrality of livestock in semi-arid areas, and 2007 was the year of the resurgence of the ‘white revolution’ centered on milk production.

Gujarat is the flagship state of the cooperative dairy industry in India which was established in 1965 with the formation of the National Dairy Development Board through joint funding from international donors and the Indian government (George, 1990). The National Dairy Development Board is a federation of regional dairies that procure milk from village level milk societies; and process, package and sell milk and dairy products to urban markets. The cooperative dairy sector comprises 177 regional dairies, operates in 346 districts and covers 133,349 village level societies (NDDB, 2010).

The formation of village societies to collect milk from marginal producers in remote areas and linking societies to dairies originated in Anand district in central Gujarat in the 1960s. This model has been replicated all over the country and Gujarat is the flagship state of the dairy cooperative sector. Gujarat has one of the highest levels of milk production for the sector which is facilitated by the state's dense network of rural roads. This enables rapidly ferrying perishable milk from remote villages to cooling plants at district headquarters. Gujarat has 15,322 village milk societies, the fourth highest in the country, and the fifth-highest milk production in India.

Watershed development identifies dairying as a 'watershed plus' (GOI, 2006a) activity to be implemented once physical interventions such as dams and farm ponds have been built. The intervention links households in villages implementing watershed development to the cooperative sector's local milk societies through livestock-loans delivered to self-help groups. As discussed in chapter 4, the presence of a village milk society has been a significant factor in village-selection for watershed development in Dahod. Self-help group members repay their loans through milk-sale to the milk society.

This chapter builds upon existing research on the cooperative dairy sector in India (Baviskar, 1988; George, 1995) and the vast body of research on contract farming (e.g. Konefal, Mascarenhas, & Hatanaka, 2005; Little, 1994; Nevins & Peluso, 2008; Watts, 1994); but departs from these works' focus on macro structures by grounding a study of commercial milk production in social actors' priorities of social reproduction, consumption and accumulation; and everyday exchanges shaped by reciprocity, identity and local politics.

I identify the central role of transaction costs, politics and economies of scale in shaping the governance of cash-milk production in the locality. This chapter describes the way in which markets are inherently and simultaneously political and social entities rather than solely economic artifacts that lie above society (Mitchell, 2002). The chapter also focuses on the way in which the market structure of high-value commodities and the political economy of development shape the terms of exchange between milk-producers and the cooperative dairy sector, a government-owned commercial agro-enterprise of the kind established by postcolonial governments in Southeast Asia, Latin America and Africa as well.

The Cooperative Dairy Sector in India

India is one of the world's largest milk producers but most of its milk is consumed in the domestic market. While private firms selling dairy products purchase milk from individual large-scale peri-urban milk-producers close to their urban markets, cooperative dairies procure milk from small-scale milk-sellers in rural hinterlands, including from sellers selling as little as one liter of a milk a day. This leads the cooperative dairy sector to boast that it alleviates poverty by providing income and employment to millions of rural households.

The regional dairy plant minimizes transaction costs in gathering milk by devolving milk collection to a village-level milk society. Milk-sellers bring milk to the society's collection center twice a day, morning and evening, at a given collection time. The dairy's tempo, a five-wheel open vehicle with a carrier collects milk from the center and transports it to the chilling plant. The milk is pasteurized, processed, and used both to

produce high-value products for local markets such as flavored milk, yogurt, buttermilk and ghee (clarified butter) and transported in liquid form to cities through feeder dairies.

Dahod's milk-producers sell milk to the Panchmahal District Cooperative Milk Producers' Union (henceforth Panchmahal dairy), one of 12 regional dairies in Gujarat, located at Godhra town in Panchmahal district adjoining Dahod. With the implementation of the white revolution, the Panchmahal dairy expanded its milk processing capacity from 200,000 to 400,000 liters per day in 2006 (PDCMPUL, 2007).

The Political Organization of Milk Production

The milk society is organized by the largest milk producers in a village who supply the greatest proportion of milk to the dairy. The society is governed by a committee comprising the society's biggest shareholders. The committee is led by a secretary, a permanent employee of the dairy and a chairperson, who is selected by rotation from the committee by its members. Milk production is shaped by local politics including contestation among the milk society's committee's members to control loans delivered to the society through chairmanship of the society, and households' representation on the milk society through a lineage leader's membership in the milk society committee. Milk production is also shaped by household-level factors including access to irrigation, labor availability and the presence of infants or small children for whom milk is produced, with surplus being sold to the society.

The National Dairy Development Board's guidelines stipulate that any village or cluster of villages that can generate a daily milk supply of 50 to 100 liters per day can form a milk society. Forming a society entails collective action costs of organizing a critical mass of milk-sellers to join the milk-society by paying a small membership fee.

Limkheda block borders Panchmahal district on its western side and is less than 30 kilometers from the Panchmahal dairy's chilling plant at Godhra, therefore it has an advantage in milk production. When Mahipura and Himmatpur's cash crop farmers formed a milk society, several neighboring villages already had milk societies supplying milk to the dairy. While Mahipura and Himmatpur's perennial well-owners could have sold milk to these societies by paying a nominal (20-30 rupees) membership fee, the leaders undertook the costly task of forming their own society. This requires explanation.

Milk societies are not only conduits for the upward movement of milk to the dairy but also the downward movement of low-interest loans from the dairy to milk-producers to purchase milk-livestock, deepen wells, and buy irrigation motors and fodder crops' seeds. The drylands are credit-scarce and access to low-interest loans from the dairy is a major motive for wealthy village leaders to form a society. Leaders meet the costs of collective action to form a society and assert rights over committee membership. Committee membership gives leaders disproportionate control over the loans to the society because the committee's chairperson's signatures are required on loan documents. While supplying milk to a neighboring society would have given Mahipura and Himmatpur's wealthy farmers income, it would not have given them access to loans.

While the wealthiest farmers provide a significant proportion of a village society's total supply, their share alone is not sufficient to meet the minimum volume to cover operation costs. Other sellers' participation is critical to sustain a society. While large and small sellers are mutually dependent, the dependence is asymmetric- small sellers are reliant on large sellers' more even supplies for the milk society's viability, and

could not have formed a society in the first place. Table 24 lists the distribution of average quantity sold per day according to the number of households.

Table 24 Milk Sale in Mahipura in 2006-2007

| Average daily milk sale in liters | Number of households | Percent of total milk suppliers |
|-----------------------------------|----------------------|---------------------------------|
| 1.5 | 1 | 8.33 |
| 2 | 4 | 33.33 |
| 2.5 | 2 | 16.67 |
| 3 | 3 | 25 |
| 3.5 | 1 | 8.33 |
| 20 | 1 | 8.33 |

Source: Household surveys conducted by the author in 2007

Six wealthy farmers from Himmatpur and Mahipura including Shankar and Veera, senior Patel leader formed the Himmatpur Milk Society in 1980. The founding members belong to the same age-cohort which was in its twenties then. Founders include Karam the secretary from Himmatpur who is the most educated of all members; Dheeru, a contractor from Himmatpur, one-time sarpanch of the Mahipura panchayat and the wealthiest founder; Shankar who was sarpanch from 2002 to 2006, and Veera, senior Patel leader and panchayat ward-member. Other sellers from Mahipura joined the milk society by paying a one-time membership fee of 20 rupees.

The milk society is governed by the Cooperative Societies Act of 1904. The Cooperative Societies Act mandates the inclusion of Adivasis in committees in Adivasi-dominated districts. Mahipura's nine-member committee has three Adivasi members- the Taaviad cash-crop farmer Sayba, his older son and a Nayak. The Adivasi members are token representatives added by the Koli founders to meet guidelines' requirements and are not informed about the committee's monthly meetings.

The milk society committee is headed by a secretary and chairperson. The secretary collects and measures milk and makes payments, and the secretary's position is permanent and salaried. The secretary is considered the most powerful actor in the society because he writes the accounts and handles monetary transactions (cooperatives guidelines do not mandate women's representation on committees, and to the best of my knowledge, secretaries are exclusively men). Cooperative dairies are economic bodies governed by the priority of maximizing production and require societies to be run along managerial principles. The Panchmahal dairy's managers emphasize that the chairperson be chosen through 'consensus' rather than election and the committee take decisions through deliberation and not voting. Rules are geared towards authoritarian power of the managerial kind and dairy managers are in fact alarmed at the prospect of democratic decision-making in societies lest democratic politics disrupt the critical task of maximizing milk production. As I will show, milk societies are inherently political because they distribute resources, and whether the politics is democratic or not, societies and milk production is shaped by politics.

Along with the secretary, the chairman is the most powerful member of the committee because guidelines vest decision-making power with the chairman and secretary. Contestation among committee members is entirely for the chairman's position and becoming chairman signifies control over the society. The chairperson's term lasts four years. Chairmanship gives a committee member control over loans because the chairperson and secretary jointly operate the society's bank account and disburse loans. The committee meets at the milk collection center every month to process applications

for loans, take stock of monthly milk collection and process insurance claims in case of livestock death or injury.

The Himmatpur milk society's secretary is Karam, a cash-crop farmer from Himmatpur who is the most educated of all committee members and is in charge of milk collection, preparation of samples for testing fat content, and recording quantity supplied. Karam arrives at the roadside collection center every morning at 6 am and every evening at 4:30 pm. Milk collection timing is 6:30-7:30 am and 5-6 pm. Karam and his assistant bring empty aluminum canisters out of the collection shed and set up the fat-measurement tray. Milk-sellers arrive with their steel cans and Karam's assistant uses a liter-sized measure to measure the quantity supplied, pouring milk into the aluminum canister. A thimble-full of each seller's milk is drawn and placed in the fat-measurement tray. The tray is sent to the dairy to measure fat content with the 'milkotester' (a fat measurement instrument). Milk-payments are made according to quantity and fat content.

Karam sits by the canister with his register which contains sellers' milk accounts. Karam notes the quantity supplied in the row against each seller's account. As each canister is filled, it is closed and lined up by the road. The dairy's tempo collects canisters and the fat-sample tray and returns empty canisters and fat readings from the previous trip. Karam calculates each seller's payment in the register on the basis of quantity and fat content. Payment to milk-sellers varies between a bi-weekly and monthly basis.

Transactions between Milk-Sellers and the Secretary

The milk society is one of the most powerful local organizations because it obtains low-interest loans and handles large amounts of milk payments on a daily basis and is a source of extra cash for many households. The secretary is considered the most

powerful actor in the society because he measures fat content which shapes the prices milk producers receive and writes the accounts, and can skim a proportion of milk-producers' payments by noting lower fat content than that reported by the dairy.

Reciprocity between the secretary and milk-seller is critical for fair payment because the dairy conducts only an annual audit and not random checks of milk-collection. This is because the dairy relies on secretaries and chairmen- among the largest milk producers in the drylands- for milk procurement in lean summer months.

In Mahipura, the decision to sell milk is shaped by wealth and political capital. Milk-sellers are more likely to be large sellers on whom the society depends for its survival, committee members who can check the secretary's power by examining the accounts at monthly meetings, or committee members' closest kin. The Himmatpur milk society is particularly opaque, with meetings and financial dealings being carried out at committee members' house rather than the milk collection center, and different sellers being paid at different frequencies. Milk sellers lacking political capital take extra precautions to ensure that they receive full payment. The cash-crop Adivasi farmer Sayba is a nominal committee member and medium milk-seller. Unlike the Chauhans and Patels who delegate milk delivery to their children or wives, Sayba does not delegate milk delivery to his wife, sons or daughters-in-law but delivers milk himself. Sayba is one of only two men in Mahipura who identify themselves as cash-crop farmers. As one of the leading Adivasis in Mahipura, Sayba is also a member of the panchayat's education committee which oversees the functioning of Mahipura's schools. Despite this, Sayba shares little trust with the milk society's secretary, chairman and powerful committee members.

Sayba is an Adivasi in a Koli village marked by Koli exclusion of Adivasis from social citizenship and adherence to ritualistic rules wherein Kolis do not eat food cooked or served by Adivasis and do not drink water in an Adivasi home. Sayba's painstaking milk delivery routine involves intense preparation of the body. Sayba delivers milk after bathing and dons a washed shirt, dhoti and Nehru cap, as if mindful of Koli norms of pollution and purity. Sayba's attire to the center is like others' attire for a trip to the market, as if for him, the external world begins beyond the boundary of his house. Sayba walks with a brisk step to the collection center and back, steel can in hand, sometimes with an umbrella to protect from sun or rain, rarely stopping to converse with people he meets en route.

Koli discursive practices are centered on the Adivasi body and its actions, and Kolis cast Adivasis as thieving, fond of drink and lazy (also Skaria, 1999; Sundar, 1997). Sayba's demeanor, disciplined body and attire present the image of the ideal Adivasi subject. Performing industry, assiduousness, 'hygiene' and impeccability are indelible parts of Sayba laying a claim to citizenship and securing fair treatment in the milk society. Sayba's performance is also an everyday counter-narrative to Koli discourses. As if challenging Kolis' accounts of Adivasis, Sayba told me pointedly one day, 'We had to work hard to get a good winter harvest this year. That's why we have been able to last so far on our field's grains. We are not the drinking type. We tend to our land, our house, our cattle and keep to ourselves.' Both Kolis and Adivasis have historically practiced cultivation but Kolis assert discursive dominance by constructing themselves as cultivators and referring to Adivasis as *jungli* (wild), forest dwellers, uncivilized,

unclean, violent and indolent. Sayba simultaneously challenged all these constructions by asserting an identity as a cultivator par excellence, assiduous laborer and model citizen.

Fair milk payments are shaped by identity, and Adivasis in Koli-dominated villages may be defrauded of milk payment. But being Chauhan is no guarantee of fair payments either. Lineages are internally differentiated and kin lacking mutuality with a leader may not be protected by him. Fair milk payments are shaped not only by identity but mutuality and reciprocity within the same lineage. The case of Chandra, Babu the Gayatri disability group's record-keeper's sister-in-law is illustrative of this. Chandra was added to Gayatri after the initial group was dissolved, secured a buffalo loan from Shankar and started selling milk. Each milk-seller receives a passbook with a record of outstanding loan, monthly interest incurred on the loan, and the milk-seller's repayment to the dairy through milk-sale. While the secretary recorded all other sellers' payment in their passbook, he retained Chandra's passbook and refused to update her payments on some pretext or the other for over a year.

It may be that Shankar and the secretary were skimming Chandra's payments because Shankar had not demanded cash for her buffalo-loan but felt that she should have given him a commission. Perhaps the beneficiary of the skimmed funds was Babu, Chandra's brother-in-law to whom Shankar was channeling Chandra's payments by way of rewarding Babu for allowing Shankar's tractor-purchase with Gayatri's loan. Chandra may have been vulnerable to being cheated because she is illiterate, her husband is a migrant laborer away from the village for long spells, and the couple does not belong to the Chauhan inner-circle. However, in retaliation, Chandra has stopped selling milk to the society and now retains it for household consumption.

Markets as Social and Political Entities

A major function of the panchayat is to facilitate economic activity and the panchayat can allocate resources to create a village milk society, which shows how the bureaucratic state and capitalist expansion are intertwined. When Shankar won his first panchayat election in 1994, he allotted land and funds for building a milk collection center, which enabled him to secure chairmanship of the milk society. Milk society chairmanship is a high-stakes reward involving contestation among the most powerful founding members of Himmatpur and Mahipura, including those with access to lift-irrigation, contracting income and membership in larger credit cooperatives such as the Bandibar Agricultural Credit Society. Committee members who can leverage resources for the milk society from other bodies such as the panchayat, a credit society or a lift-irrigation scheme are at an advantage in becoming the chairman.

In 2004, Veera, senior Patel leader, panchayat ward-member and Tree Growers' Cooperative chairman lobbied for the milk society's chairmanship. Shankar and Veera had agreed that Shankar would support Veera's candidature for chairmanship in exchange for Veera delivering him Patel votes in the 2002 panchayat election. Veera delivered his section's votes and Shankar won the election. In 2003, Mahipura was selected as a watershed development site, and with the intervention's resources at his disposal, Shankar lobbied for milk society chairmanship in exchange for channeling watershed development's monies and materials to Himmatpur and Mahipura's committee members, even allotting a self-help group to Karam the milk society's secretary. The committee switched its support from Veera to Shankar. Veera retaliated by shifting his membership to neighboring village Pania's milk society and selling milk there. Other

Patels followed suit to protest against their leader not being made chairman. In 2007, nine Patels had lactating livestock but sold milk either to the Pania society, retained it for consumption or shifted from cash-milk to cash-vegetable production. This made an even bigger dent on the milk society because the Patels with abundant irrigation were bigger milk suppliers than the Chauhans. Policy organizations' rhetoric of 'linking producers with markets' suggests an unmediated relationship between producers and markets. But milk-supply is as much a political transaction as an economic one, and the act of supplying milk is also an act of patronage to a particular society.

Shankar and Karam expected to meet the milk society's shortfall with buffalo-loans for self-help group members. Livestock-loan beneficiaries comprised those who had face-to-face contact and reciprocity with Shankar. Twelve households in Mahipura sold milk in 2006-2007 and 10 of them sold loan-livestock's milk. Loan beneficiaries include two Barias and 10 Chauhans including Shankar and his brother, and Babu and his two brothers. Eleven of 12 milk-sellers in Mahipura share kin relations or hamlet-based reciprocity with Shankar. Production and exchange for markets are implicated in regulation which is a political process, and in the absence of regulation, reciprocity based in the locality serves as a guarantee of fair milk payments.

Consider milk-livestock ownership among Chauhans, Barias and Patels, who have the highest irrigation endowments and capacity for milk-production, delineated in Table 25. Sixty-nine per cent Chauhans, 57 per cent Patels and 57 per cent Barias own milk livestock. However, loan-livestock were the first bovines for 6 out of 10 Chauhans, and if these were excluded, Chauhan livestock ownership falls to 43 per cent, lower than the Patels and Barias. Livestock-loans delivered by their sarpanch played a critical role in

expanding Chauhan ownership, demonstrating how political capital continued to facilitate the expansion of economic capital for the most powerful lineage in Mahipura.

Table 25 Owners and Non-owners of Milk-Livestock in the Largest Lineages

| Lineage | Milk-livestock owners | Milk livestock non-owners | Milk-livestock owners as a proportion of the lineage |
|---------|-----------------------|---------------------------|--|
| Patel | 16 | 7 | 57% |
| Baria | 28 | 13 | 57% |
| Chauhan | 16 | 2 | 69% |

Source: Household surveys conducted by the author in 2007

The Chauhans, Barias and Patels have the largest proportion of surplus farmers with adequate crop residue and abundant fodder to raise milk-livestock. Table 26 delineates the proportion of surplus producers according to lineage. Thirty five per cent Chauhans and 61 per cent Patels are surplus-foodgrain producers. Seventeen per cent Chauhans and 18 per cent Patels even sold maize in 2006-2007, and 13 per cent and 32 per cent respectively sold rice. Maize and rice are indigenous crops that generate more leaves and longer stalks which are a rich source of fodder.

Table 26 Distribution of Surplus Foodgrain Producers According to Lineage

| Lineage | Number of surplus producers | Proportion in the lineage |
|---------|-----------------------------|---------------------------|
| Chauhan | 8 | 35% |
| Baria | 12 | 24% |
| Patel | 17 | 61% |
| Taaviad | 2 | 14% |
| Labda | 0 | 0% |
| Nayak | 0 | 0% |
| Bhabhor | 0 | 0% |
| Total | 39 | |

Source: Household surveys conducted by the author in 2007

While surplus foodgrain production provides crop residue, cash-crop production generates income for purchasing fodder from the market during a drought. Thirty-nine per cent Chauhans sold either surplus foodgrains or cash-crops including wheat, lentils,

castor, mustard, yellow gram, flat gram, white gram, bitter gourd, flat beans, onions, seedlings and sunflowers in 2006-2007, as did 36 per cent Patels.

Despite the Patels' higher perennial-well ownership than the Chauhans, higher foodgrain surplus and similar agricultural-market participation, none of the Patels sell milk to the Himmatpur milk society. This is despite the Patels owning the highest proportion of calves in Mahipura (61 per cent households) and a high proportion of lactating livestock (35 per cent households). Table 27 outlines the distribution of calves across lineages.

Table 27 Distribution of Calves According to Lineage

| Lineage | Number of calves | Households owning calves | Calf-owners as a proportion of lineage |
|---------|------------------|--------------------------|--|
| Chauhan | 25 | 14 | 61% |
| Baria | 35 | 24 | 49% |
| Patel | 29 | 17 | 61% |
| Taaviad | 10 | 5 | 36% |
| Labda | 3 | 3 | 75% |
| Nayak | 1 | 1 | 33% |
| Bhabhor | 0 | 0 | 0% |

Source: Household surveys conducted by the author in 2007

Patel discontinuation of milk supply coincides with Veera boycotting the society, and constitutes both a form of exit to sanction the society's committee and because the Patels believe that their interests will no longer be protected because of their inability to monitor the secretary. The Patels switched from cash-milk to cash-vegetable production. Thirty-nine per cent of Patels sold cash-vegetables in 2006-2007 to the Wednesday vegetable market at Morwa. Cash-vegetable production across lineages, delineated in Table 28 reveals a reversal of Chauhan and Patel market strategies- the Patels were the largest cash-vegetable producers while the Chauhans were the smallest.

Table 28 Distribution of Cash-Vegetable Producers According to Lineage

| Lineage | Number of cash-vegetable producers | Proportion in the lineage |
|---------|------------------------------------|---------------------------|
| Chauhan | 2 | 9% |
| Baria | 12 | 24% |
| Patel | 11 | 39% |
| Taaviad | 2 | 14% |
| Labda | 0 | 0% |
| Nayak | 0 | 0% |
| Bhabhor | 0 | 0% |
| Total | 27 | |

Source: Household surveys conducted by the author in 2007

My attempt through this account is to show that (commodity) markets are political phenomena as much as economic ones and are structured through politics. Commodity milk production is mediated by issues of local regulation which is influenced by those who govern the milk society and panchayat. Control over milk societies and panchayats is shaped by economic wealth, caste-tribe status, lineage identity and political networks. Milk-sellers from Mahipura are either Chauhans or Barias proximate to Shankar whose interests he protects, or medium- and large milk-sellers who brandish economic power over the society and are not only guaranteed fair payments but also a bonus for elevated milk-sale. Cash vegetable production by the Patels is an equally political response to the closing of avenues for milk-production, and both cash-milk and cash-vegetable production are constituted by place-based politics. Both participation in and withdrawal from exchange are political acts. While markets are considered to be organized between impersonal buyers and sellers, all markets are in fact shaped by social and political relationships.

The Bureaucratic State, High-Value Commodity Production and Markets

Livestock-loans enable dairies to incorporate marginal households into cash-milk production. The state links dairies to rural households who have the land, water and commons to raise livestock. But the state's role in commoditization is not new and represents a continuation of the state's attempt to extract surpluses from the drylands by extending credit for irrigation, livestock, fertilizer, seeds and motors through agricultural credit societies (Ebrahim, 2000) and cooperative dairies (George, 1990, 1995). In 1962, the Government of Gujarat's Cooperative Department boasted 14,596 cooperative societies with a membership of 2.2 million farmers and a working capital of 1.75 billion rupees (GOG, 1965). Agricultural societies numbering 7,728 were considered the most important kind of society and formed 51.67 per cent of all societies (GOG, 1965).

Commodity milk-production through watershed development represents continuity of the state's attempt to extract agrarian surplus and consumption goods for urban constituencies through watershed development. What is new is the extension of the economic frontier from perennial well-owners to marginal producers, representing the movement of capital into frontier credit categories.

Table 29 illustrates the distribution of advantageous characteristics for cash-milk sale among milk-sellers in Mahipura. All milk-sellers have winter or perennial wells which generates crop residue. Seven out of 12 households have sufficient household labor to care for livestock. 11 out of 12 households have a perennial supply of fodder which contributes to high milk volumes and ensures that these families do not have to purchase fodder from the market. Seventy five per cent milk-sellers share the same lineage as the milk society's chairman (Chauhan), 91 per cent live in proximity with him,

all have access to irrigation, 75 per cent have small children and 91 per cent have access to fodder.

Table 29 Characteristics of Milk-Selling Households

| Chauhan lineage | Proximity to sarpanch | Irrigation access | Presence of small children in family | Availability of family labor | Fodder availability |
|-----------------|-----------------------|-------------------|--------------------------------------|------------------------------|---------------------|
| X | X | X | | X | X |
| | X | X | X | | X |
| X | X | X | X | X | X |
| X | X | X | X | | X |
| | X | X | | X | |
| X | X | X | | X | X |
| X | X | X | X | | X |
| X | X | X | X | | X |
| X | X | X | X | X | X |
| * | | X | | X | X |
| X* | X | X | X | X | X |

Note: * Indicate milk sellers who sold self-owned livestock's milk

Source: Household surveys conducted by the author in 2007

Inputs of Milk Production

Milk production requires fodder, feed, water, labor, veterinary services and insemination. Large and small milk-sellers' cost of milk production diverges, a phenomenon well-documented in scholarship on smallholder milk-production worldwide, and their rewards from participation in milk production are asymmetric. Consider the differences in expenses on inputs.

Fodder. Fodder includes green fodder comprising grass from fields and field boundaries, grazing lands and forests; dry fodder comprising crop residue (stalks and husk) and nutrients such as cottonseed and oilseeds cakes, which are cakes made by pressing the residue from oil extraction from seeds. Perennial well-owners own better land, cultivate in all the plots of land that they own rather than being forced to restrict

sowing to one or two plots due to lack of water, produce surplus foodgrains and have the greatest reserves of crop residue. Perennial well-owners can even grow a summer fodder crop of *bajra* (barley) when crop-residue is exhausted and may not need to graze livestock. The ownership of milk-livestock is strongly associated with access to irrigation, as Table 30 illustrates. While only 33.3 per cent of non-well owners have milk-bovines, 57.2 percent of summer-well owners, 74.1 per cent of winter-well owners, and 80.8 per cent of perennial well-owners have milk-bovines.

Table 30 Ownership of Milk-Bovines According to Well-Categories

| Well category | No milk-bovines | One milk-bovine | Two or more milk-bovines | Milk bovine owners as a per cent of their well-category |
|-----------------|-----------------|-----------------|--------------------------|---|
| No wells | 6 | 3 | 0 | 33.3 |
| Summer wells | 3 | 4 | 0 | 57.2 |
| Winter-wells | 7 | 8 | 12 | 74.1 |
| Perennial wells | 15 | 31 | 32 | 80.8 |

Source: Household surveys conducted by the author in 2007

Winter-well-owners supplement crop residue with fodder from the fields and expend more labor than perennial well-owners in squatting in fields and cutting fodder with a sickle. Dryland cultivators sow subsistence crops' seeds densely in *chaumaso* and *shiyaalo* and periodically 'weed' surplus shoots and feed them as green fodder. This increases water, nutrient and sunlight for the remaining stalks and provides green fodder for livestock. Field fodder can provide up to two months of fodder.

While winter-well-owners expend more labor than perennial well-owners to harvest this source of fodder, summer-well-owners and non-well-owners who cultivate only in monsoon do not harvest stalks for fodder and instead conserve them for foodgrains, and obtain fodder solely from the commons. Summer well-owners and non

well-owners expend more energy on fodder collection than winter well-owners. Grazing entails three to six hours of labor every day, and much of grazed livestock's energy is dissipated in the grazing process itself.

Feed. Medium and large farmers in irrigated districts supplement fodder with oilseed cakes which are a by-product of their large agricultural operations, but dryland farmers typically do not supply this food. The dairy manufactures and sells urea-molasses crystals which increase the metabolism rate, and wealthier milk-sellers in Mahipura purchase urea-molasses and feed it to lactating livestock. Urea-molasses increases milk's fat-content and wealthier milk sellers typically earn 1-3 rupees more per liter of milk than those who do not feed supplements. Shankar and Kamla are the only milk-sellers to receive 12-13 rupees per liter for milk because both feed their buffaloes urea-molasses. Table 31 indicates the range and distribution of the price received by milk-sellers.

Table 31 Distribution of Per-Liter Price to Milk-Sellers

| Price per liter | Number of households | Percent of total milk-sellers |
|-----------------|----------------------|-------------------------------|
| 10 | 4 | 40 |
| 11 | 4 | 40 |
| 12 | 1 | 10 |
| 13 | 1 | 10 |

Source: Household surveys conducted by the author in 2007

Labor. Bovine livestock's care involves milking, cleaning sheds every morning, watering and grazing livestock, gathering fodder by squatting for hours and cutting grass with a sickle, milking livestock and taking milk to the collection center in the morning and evening. Livestock management involves four to seven hours of labor each day and is predominantly women's work.

Water. Livestock also have to be watered each day. The cost of watering is lower

for perennial well owners who can draw water from a homestead well and higher for those who have to fetch water from a handpump and carry pots on their head to empty water into troughs. Perennial well-owners also cool off their livestock in summer by splashing water from a homestead well or handpump.

Insemination. Insemination is provided both by the dairy and private bull owners and ranges from 250-300 rupees, and involves paying for the service of a breeding bull, its transportation and the handler's fee. Households prioritize the ownership of oxen for plowing, and those who purchase milk-cows from the market can inseminate their cow with their plowing bull. However, the dairy delivers buffaloes which must be serviced by a water-buffalo, and a milk-seller must pay an insemination fee.

Returns from Milk Production

The returns from milk production include cash-income, milk for consumption including colostrum and raw milk for children, and milk for tea and yogurt; the acquisition of a female bovine and calf for herd expansion, and manure. Per-seller milk-sale in Mahipura ranges from 1.5 to 20 liters as illustrated in Table 24, and the mean daily sale per household is 2.07 liters. Shankar has five lactating buffaloes and supplies 20 liters of milk per day, constituting 67 per cent of Mahipura's supply. The dairy rewards larger suppliers with an annual bonus because they keep the dairy viable during summer. The price paid to milk sellers ranges from 10 to 13 rupees per liter depending on fodder quantity and supplemental feed. Table 31 illustrates that most milk-sellers earn 10-11 rupees because they rely only on dry fodder and occasional green fodder.

For all new sellers in 2006-2007, a motivating factor for taking a livestock-loan was the desire for milk for children. Seventy per cent of new milk producers have small

children ranging from three months to 11 years in age, and livestock are purchased at the lactation stage, providing milk as soon as a livestock is brought home. In the food-scarce drylands, milk is a significant dietary supplement which prevents infant and child malnutrition. One by-product of milk-production is a calf which creates livestock endowments for meeting future expenses on education, setting up a trade, or giving a wedding gift. Livestock enable household- and social-reproduction. For 33 per cent of households supplying milk in 2006-2007, the loan buffalo was their first milk livestock, enabling herd expansion.

Consumption, social reproduction and accumulation are major motives for households to take livestock loans. Livestock-loans enable meeting immediate desires and future aspirations. This suggests the limitations of considering commodity producers simply as producer-subjects and considering them as consumers as well, moving beyond conceptions of identities as uncomplicated and singular (Ramamurthy, 2003).

Technologies for Securing Continuous Milk Supply

Eighteen families in Mahipura produced milk in 2006-2007 but only 12 sold milk. There are no intra-village milk sales but people gift surplus milk to kin with infants. Five of six households with lactating livestock who do not to sell milk emphasize that their livestock are not loan-livestock; therefore they are under no compulsion to sell milk. The binding nature of the contract leads people to see selling milk through loan-livestock as a compulsion, and people stop selling milk once their loan is paid.

Livestock loans enable the dairy to guarantee continuous milk supply in the face of milk-producers' competing uses for milk; competing sources of income (from migration and cash-vegetable production); and the competing uses of household labor

between milk-production and other activities. Large-scale mechanized plants like the Panchmahal dairy which has a processing capacity of 400,000 liters require high procurement levels to cover operation costs. To guarantee milk supply, the dairy extends livestock-loans to households with a 25 per cent subsidy to Kolis and 30 per cent subsidy to Adivasis. Borrowers repay their loan through milk-sale, and *the loan is in fact the production contract between the dairy and milk-seller.*

The average price of a buffalo which is sold with its calf is 18,600 rupees and a 25 per cent subsidy for Kolis reduces the cost to approximately 14,000 rupees. A buffalo has a 12-month lactation period which is followed by an inter-calving ('dry' or non-lactating) period of 15 months when interest accrues on the loan because no milk can be sold then. A buffalo's life-cycle is 10-11 years. Buffaloes reach reproductive age at 2.5 years and their reproductive life is 7-8 years or five to six calvings. The Panchmahal dairy's loan's interest rate is 2 per cent per month compounded monthly.

Producers with just one milk-livestock represent 80 per cent of Mahipura's producers. These sellers produce four liters of milk a day and sell two liters per day to the dairy. Assuming that the dairy pays 12 rupees per liter for a fat proportion of 5.9 per cent, these milk-sellers earn a total of $2 \times 12 \times 30 = 720$ rupees each month. During the first lactation cycle of 12 months, a milk-seller repays 5,990 rupees and owes the dairy 8,190 rupees. The buffalo then runs dry, interest accrues for 15 and the outstanding loan increases from 8,190 rupees to 11,119 rupees, as delineated in Appendix F. Assuming that a household gets the buffalo inseminated gratis, the loan-taker starts earning net income only from month 64 onwards, five years after the buffalo was purchased, and close to the end of the buffalo's reproductive life (see Appendix F). Calvings produce

buffalo-calves which themselves reach reproductive age in 2-3 years and can produce milk, but this is fraught with uncertainty because it is contingent on the birth of a female calf. The compulsion to repay the loan induces frequent pregnancies that milk sellers may not carry out otherwise due to fodder shortage.

The dairy's loan is a financial technology that alters milk producers' behaviors towards livestock. To repay a loan, a single-buffalo owner must have three calvings and space them just 1.25 years apart. While poorer milk-sellers might gift calves to kin and even earn income through a calf sale, poorer milk-sellers face poor prices as single sellers in local markets. Table 32 illustrates the average duration for which each milk seller sold milk, which shapes total earnings and time taken to repay the loan. Most milk-sellers sell milk for only eight months of the year.

Table 32 Distribution of Milk Sale Duration in Months

| Number of months for which milk was sold in the year | Number of households | Percent of total households in Mahipura |
|--|----------------------|---|
| 6 | 2 | 1.64 |
| 7 | 1 | 0.82 |
| 8 | 7 | 5.74 |
| 12 | 2 | 1.64 |

Source: Household surveys conducted by the author in 2007

Buffalo sellers are milk-sellers themselves and sell buffaloes after one, two and even three calvings, and a buffalo's age is not always possible to detect during purchase (BankofIndia, n.d.). In case a buffalo has had three calvings, the buffalo may become permanently dry by the time a borrower repays her loan. The case of the Baria couple Samjhu and Mohan is illustrative of this. Samjhu and Mohan's buffalo delivered a little over two liters of milk a day rather than the average of four, leaving less than half a liter for household consumption, suggesting that they were sold a buffalo which had had

multiple calvings. Mohan and Samjhu are in their early forties and have 1.27 hectares of land, a plowing bull, diesel motor and winter well. Mohan discontinued wage migration in 2004 because chances of accidents in construction work increase with age. Since his income stream from migration has exhausted, Mohan seeks cash income from agriculture. Mohan and Samjhu cultivated cash-vegetables in winter in 2007 but were short on funds to deepen their winter-well. As spring progressed without well-deepening, the plants and the couple's hope of cash income withered. The couple now desperately sought milk-income, but was worried about whether the buffalo would yield milk for even two more calvings to repay the loan.

Contract milk production signifies double commodification of both milk-livestock and milk. The loan is a legal-financial instrument that treats a buffalo as an input commodity to be spent and dissipated. The loan embodies commodification and alienability- the capacity of the buffalo to be legally separated from the farmer wherein the farmer has no control over impregnation, longevity and the decision to withdraw from milk sale. The loan, interest rate and price of milk together induce milk production through strenuous, continuous pregnancies. For dryland households, livestock have practical, cultural and aesthetic value as security, collateral, prestige, social standing, endowment and gift, and not solely as inputs for milk production.

The commodity status of buffaloes is 'not intrinsic but assigned' (Castree, 2003). The loan also shapes milk-sellers' actions towards milk-livestock by inducing the feeding of urea-molasses which farmers do not feed self-owned livestock. The dairy manufactures and sells urea molasses' granules which comprise urea, molasses, proteins, minerals and gelling agents. The feed's main ingredient is urea which speeds up

fermentation in the buffalo's digestive tract, resulting in efficient utilization of fodder and rapid calf-maturity. Urea-molasses reduce the inter-calving period and produce mature calves, desirable traits for dairies.

However, these physical traits signify extensive alteration of livestock's bodies. Farmers consider the heat of the urea to generate the same heat that farmers say fertilizer generates in land. I used to borrow a pint of milk for tea occasionally from Kamla, who had been a member of the Saraswati micro-credit group and had paid Shankar a 1,000 rupee bribe for her buffalo. I was surprised one morning to find Kamla's buffalo licking mineral granules from a metal pan in the cowshed, with Kamla watching dismayed. The buffalo was licking the dairy-manufactured urea molasses mineral granules, the cost of which is deducted from milk payments. Kamla was visibly upset about feeding her buffalo urea-molasses in which the heat of the urea generates the same heat that farmers say fertilizer generates in land.

According to Ramabhai Chauhan, fertilizer makes the land 'taught' like iron and 'strains' it like a fevered body, transposing the human qualities of body heat, rigidity, ill-health and strain onto land, constructing land as a live entity. Ramabhai revealed that soft and yielding land is critical for a good harvest so that roots can breathe, but while fertilizer generates heat that speeds up biochemical processes to increase plant growth, it has an adverse physical impact on land, altering its texture and reducing its suppleness. Cultivators transpose the effects of urea on land to cattle because they know what fertilizer does to the human body. Cultivators handle fertilizer and it is hot and corrosive to the touch. Cultivators resist fertilizer because it damages soil and enters their bodies through the food chain. Despite the trace amounts of fertilizer applied to rainfed maize,

people wait for rain to wash the fertilizer off maize saplings before feeding them even to livestock as green fodder. Land on which subsistence food is grown is fed only trace amounts of fertilizer to preserve soil quality and minimize fertilizer ingestion.

Peasants in Dahod take pride in the small amounts of fertilizer they use relative to farmers in agrarian districts, and some assert that they do not eat fertilizer-grown food because it makes them ill. Cash-crop farmers who grow vegetables for both home consumption and market production grow both types in separate plots, fertilizing the commercial plot and leaving the subsistence plot uncontaminated.

Milk producers articulate the same heating and damaging qualities of fertilizer in urea-molasses which contain urea, a fertilizer ingredient. Urea-molasses transform the bodily rhythm of cattle and seasonal time of calving into the daily time of the dairy's plant. While the milk-producer is supposed to be detached from the buffalo and not feel the heat, discomfort and biological alteration induced by urea-molasses, detachment is a fiction of economics that is not really achieved in real-world production (Holm, 2007). Artificial inputs that generate body states in bovines produce emotions of discomfort, repugnance and loss of control in humans (see Jalais, 2010; Mullin, 1999; Noske, 1997 for nuanced accounts of human-animal relationships). Milk sellers do not experience complete ownership of their livestock until their loan is repaid; they discontinue feeding urea-molasses, and impregnate their cattle beyond purposes of loan repayment. Though subsidized livestock-loans enable less well-off households to build their livestock portfolios, the terms of loans are shaped by asymmetries in the ability to design loan contracts between the dairy and milk-sellers.

Milk-Sale Pattern in Mahipura

Income from milk sale in Mahipura ranges from 4,800 to 28,800 rupees, as described in Table 33, and reflects higher returns for wealthier sellers for higher fat-value and higher quantity of milk. In a region of depressed wages and lack of employment, income from milk sale provides a significant proportion of income to milk sellers. The field-labor wage in Dahod is 30 rupees a day, 60 per cent less than the official minimum wage of 77 rupees per day. A minimal milk-income of 20 rupees per day at the rate of 2 liters per day sold at 10 rupees per liter produces 66 per cent of the daily income from agricultural labor. But unlike field-labor employment which is available for no more than nine days of the year on average in Mahipura, milk production provided guaranteed income over six months or more. Milk income ranges from 12.5 to 93 per cent of total income of milk-sellers, with its average contribution being 26 per cent. The next section explores how milk income is shaped by the political economy of pricing.

Table 33 Distribution of Annual Earnings from Milk Sale

| Rupees | Number of households | Percent of total milk-sellers |
|--------|----------------------|-------------------------------|
| 4,800 | 2 | 20 |
| 5,280 | 1 | 10 |
| 5,400 | 2 | 20 |
| 6,000 | 1 | 10 |
| 7,200 | 1 | 10 |
| 7,920 | 1 | 10 |
| 8,085 | 1 | 10 |
| 9,360 | 1 | 10 |
| 11,880 | 1 | 10 |
| 28,800 | 1 | 10 |

Source: Household surveys conducted by the author in 2007

Market Structure and the Determination of Value

Dairies are monopsonistic milk-buyers. As a monopoly buyer of perishable raw

milk from remote communities, the dairy has disproportionate power in shaping the price paid to milk-sellers. The cooperative dairy industry sets milk prices and shapes milk-sellers' returns from milk-sale. Dairies set the milk price to be paid to farmers by estimating the cost of milk production (Shah, 1987a). The National Dairy Development Board sets milk price for the cooperative dairy sector. The Board's website proclaims that it was founded 'to replace exploitation with empowerment, tradition with modernity, stagnation with growth, and transforming dairying into an instrument for the development of India's rural people'. Likewise, the Panchmahal dairy's annual report states that it provides 'rural employment' (PDCMPUL, 2007); both articulating lofty goals of economic and social uplift.

However, the prices set by the cooperative dairy sector are shaped by relations of class and geography, and crafted through metropolitan assumptions about rural labor and the value of inputs such as fodder and water. Researchers on the dairy industry in Gujarat declare that small farmers 'have neither the knowledge nor the appreciation of the concept of cost of production', (Bardhan & Huria, 1987), therefore 'whatever price the producer gets for the milk is an addition to... income' (Bardhan & Huria, 1987). This claim denies that small farmers have keen appreciation for production costs because they are integrated in labor, input, land, education, livestock, capital, house-building and foodgrain markets.

Postcolonial development policy is marked by unequal terms of trade between agriculture and industry such that one unit of an agricultural commodity secures less than one unit of a commodity produced outside the agricultural sector. This is a fundamental strategy of development planning to finance industrialization, with antecedents in

Rostow's (1960) model of economic development. This model equates development with industrialization and emphasizes economic development through initial investment in the industrial sector by drawing resources from agriculture. Skewed terms of trade between agriculture and industry mean that while the price farmers received for maize was 9 rupees a kilo in June 2007 in Dahod, the price they paid for a liter of diesel was 26 rupees, three times the price of a unit of maize. A 25 kilo bag of DAP fertilizer costs 490 rupees, entailing the sale of 54 kilos of maize, i.e. a price ratio of 2:1 per unit of fertilizer and maize. A kilogram of tea that rural households purchase from the market costs 240 rupees and denotes a price ratio of 27:1 between tea and maize. 'We do the business of selling grains cheaper than we buy them,' sums up cultivators' dilemma of receiving depressed prices as agricultural sellers and steep prices as commodity buyers. As grain sellers in perfect competition markets, small-scale producers receive low prices, but as food consumers, they have to buy the same grains- unprocessed- from shopkeepers at 25-75 per cent higher prices.

As a result of the industrial bias of development policy, the prices of industrial commodities rise faster than the prices of agricultural commodities. The inputs of milk production including feed and diesel for irrigating fodder crops rise faster than milk. In its study of livestock-loans for poor milk-sellers in the 1980s, the Bank of India found that while the price of commercial feed rose from 56 rupees per bag in 1978 to 72 rupees per bag in 1980, an increase of 28 per cent; the average price of milk rose from 1.75 rupees to 2 rupees, a rise of only 16 per cent, leading to a 12 per cent erosion in the income from milk (Bank of India, n.d.).

Dairy technocrats systematically discount the costs of labor, fodder and water in

estimating the cost of milk production. Dairy researchers label crop residue ‘waste’ and assign it zero price (e.g. Shah, 1987b) though it has opportunity cost for mulching and manure. For most milk producers, crop residue is available for only a few months after which fodder must be cut from fields and grazing lands. Technocrats, policymakers and government officials assume fodder to be ‘freely’ available while fodder has to be harvested through manual labor by squatting in fields or grazing lands for two-three hours each day.

Researchers in Gujarat as well as international donors such as the World Bank which funded the dairy sector in the 1970s describe rural labor as ‘flexible’, ‘unemployed’, ‘highly underemployed’ (see Shah, 1987b) and ‘at home all day’ (Candler & Kumar, 1998), ignoring that people recorded as ‘unemployed’ in censuses because of lack of opportunities for formal employment in fact migrate to cities to earn a living wage, and those who stay behind who are largely women, bear disproportionately large burdens of tending to fields, livestock, subsistence, children, families and social relationships and are neither ‘flexible’ in terms of time-allocation nor ‘unemployed’ (Agarwal, 1985, 1989), except that their work is not accounted for by policymakers and national accounting systems (Waring, 1988). Researchers construe village labor as ‘low cost labor’ (Candler & Kumar, 1998), discounting policy-led disparities in urban and rural wages to sustain industrialization through cheap supply of agricultural raw materials based on depressed rural wages (Chakravarty, 1987; Frankel, 1978; Kohli, 1994; Varshney, 1995).

The cooperative dairy sector defines which objects involved in milk production should be considered ‘inputs’- manufactured feed and insemination services which

dairies themselves sell; and which should be considered ‘free gifts’ - fodder, water and labor. Constructing fodder as a ‘free’ resource is a discursive cut that erases women’s labor in gathering fodder (e.g. Gururani, 2002; Sarin, 2001). What counts as an input is a matter of ontological invention (Castree, 2003). Milk production is nested in the social practice of grazing and fodder-gathering and domestic acts of cow-shed cleaning and watering, without which livestock will fall sick and die. The economy relies on labor considered to lie outside the economic sphere but which is crucial for the maintenance of the economy (Polanyi, 1957).

Milk pricing relies on discounting the value of labor. Technocrats have little comprehension of the daily strain of livestock care, grazing and gathering fodder. Where there is some knowledge that livestock management is largely women’s work, technocrats discount women’s labor. Fetching water is exclusively girls’ and women’s task and men perform it only when norms of pollution dictate that women not touch water utensils during menstruation. Women also perform the time-consuming, tedious and strenuous task of cleaning cow sheds by squatting on the ground every morning and scooping manure by hand out of pits made in the ground by hooves throughout the shed. Men milk cattle occasionally and take livestock grazing but never clean the shed or harvest fodder.

Dairies’ price-setting policies are shaped by gender, geography and class. Dairies systematically discount the cost of both labor and fodder in milk-production and can impose this because they are monopsonistic buyers in remote villages. Private milk traders lack the infrastructure to gather milk from remote producers and operate only in villages in cities’ and towns’ vicinity where they pay milk-sellers much higher prices

ranging from 13 to 16 rupees per liter.

Accounts of the contract in institutional economics propose that contracts are struck between symmetrical parties that command equal power in designing a contract (Cheung, 1970; Coase, 1960; Demsetz, 1967). But in conditions of asymmetrical bargaining power between monopsonies such as state-owned dairies that purchase raw milk and remote milk-producers, contracts are better understood as embodying the ‘relative bargaining power’ (Knight, 1992) of the actors entering into a contract.

With the market-centrism of rural development policy, the relationship between markets and development is of a particular oligopolistic form of the market as the pathway to development rather than development enabling participation in markets. The demands of agricultural markets driven by large-scale firms’ priorities of value creation vest disproportionate power in shaping market structure, input prices and output prices within oligopolistic firms that are not subjected to the same equalizing forces as competitive markets.

Attempts to integrate the poor with capital in the drylands for high-value commodity production, such as through the extension of livestock loans through micro-credit are premised on the assumption that the poor can be mobilized in entrepreneurial undertakings if they receive credit. But commodity production requires combining loans with other kinds of capital. Following critique that watershed development ignores the needs of landless households and the poor because its interventions are private-land-based (Kerr, 2002; Kerr, Milne, Chhotray, Baumann, & James, 2007), the introduction of large-scale dairying offers an ideological counter-argument by virtue of its supposed land-neutrality. Dairy policymakers argue that milk production can be performed by the

poor and rich alike because it requires only water and fodder and not land, and water and fodder are communal resources. However, milk production is cheaper for perennial well owners who cultivate in three agricultural seasons and produce abundant crop residue which provides fodder. In the absence of irrigation, loan-livestock do not generate an income-stream.

Consider Manju's case, who is one of the least well-off in Mahipura. Manju and her husband Sabur carefully built patron-client relations with Shankar and Bordi's older Patel leader Veera to access government schemes for those in absolute poverty. Both Manju and her daughter-in-law joined Veera, the senior Patel leader's self-help group. But Manju's daughter-in-law withdrew her money because she could not afford to make the monthly payments. Manju is still a part of the group and makes monthly deposits, faintly confused by why the powerful Indian state needs her to give it money to be able to give her a loan, but tickled by this reversal between the benefactor and receiver in her relationship with the state, and carefully making monthly payments.

I met Manju in her courtyard one morning, aesthetically bordered with a neck-high wall of thatched grass and bamboo. Manju's single-room shelter's roof had caved in during the rains and she was preoccupied with getting emergency government assistance to rebuild it. Manju has an infertile upland plot, no well, subsists below the poverty line and is forced to buy foodgrains from the market because government rations for the poor have been periodically whittled down since the adoption of liberalization policies in 1990 and no longer meet household needs of the poor (Cheriyān, 2006; Patnaik, 2004). The poor now either purchase foodgrains from increasingly volatile markets or starve. During

the last week of each month, Manju buys maize or rice, whichever is cheaper from Himmatpur's shopkeeper, sometimes by borrowing money.

The one symbol of sustenance in her house that morning was chicks running around the courtyard, which I assumed she raised to eat. Manju mentioned earning 400 rupees from selling chicken in Diwali; the equivalent of two weeks' field-labor wages. I queried why she did not eat chicken herself because she obviously faced a food shortage. Manju said, 'How can we eat them when we raised them?' It struck me as odd that Manju said that livestock one raised could not be eaten despite having considerable need for food. After all, all of the family's assets could be taken in with one glance and the only other enumerable asset was a buffalo calf.

I noted the calf and the absence of its mother, and asked if Manju had any lactating buffaloes. Manju replied with restraint, 'We don't have a buffalo because we can't feed it. It's a moral crime to get a buffalo if you can't feed it (*paap laage*).' Manju told me weeks later that she had got a buffalo through a livestock-loan from the milk society. Recall that her husband Sabur is a nominal member of the milk-society committee. But the buffalo died. It was implicit that the buffalo had died of starvation. Manju's denial of eating chicken one had raised and injunctions against getting a buffalo if you could not feed it appeared to append atonement for the death of her animal.

Manju's refusal to get another buffalo because of the inability to feed it has a parallel in other households' attitude to watershed development's subsidized commercial seed kits. Commercial seeds require timely applications of water two to four times in a crop-cycle, which non-well owners and summer-well owners cannot afford because each water turn costs 100-150 rupees. Despite a 50 per cent saving on a seed kit worth 500

rupees, households lacking winter- and perennial wells refused to purchase subsidized commercial seed kits because their seeds would not bear grain. High-value commodity production, including milk-production is irrigation-intensive and can only be undertaken by the wealthiest households who have access to capital and irrigation.

Advocates of contract production cast it in the language of entrepreneurialism (Braun & Kennedy, 1994) which suggests that high-value commodity producers can command advantageous prices for their produce. This is not the case because monopsonistic firms- both state-owned and private- dictate price and commodity producers are price-takers. Commodity production as a development strategy is a techno-fix that takes political questions such as land distribution, irrigation, food policy, state investment in human capabilities, market structures and the terms of trade between agriculture and industry out of scrutiny.

In a period of neoliberalizing development policy, dryland households are expected to engage with high-value commodity markets, change their ‘mindset’ (*mantavya*) (GOG, 2007), and be risk-taking and responsive to signals from particular forms of the market that generate monetary value. Commodity production is not only an economic process but also political and social, and markets cannot be disembedded from the social contexts in which they are embedded. What value is generated, and what inputs, erasures, and acts of de-valuing go into making one type of commodity complicate high-value commodity production as a development strategy. Commodity production is a political process shaped by relations of power between wealthier and less well-off households in the drylands because of firms’ reliance on local institutions to

procure produce, between the drylands and metropolises and between enterprises and producers.

7. Conclusion: The Mangle of Market-Driven Development and Democratic Politics

This dissertation explored the implementation of market-driven development in the form of watershed development in the drylands through elected local bodies. In the wake of almost two decades of democratic decentralization, the study explored the way in which political brokerage, collective action, and spillover effects of struggles over natural resources influence the cartography of market-driven development. Watershed development is a form of institutional change to bring into being productive subjects and high-value commodity production in rainfed areas. On the basis of ethnography in Dahod district, dryland western India, I explored how social and economic change unfolds in the context of market expansion and the entrenchment of democratic decentralization in an era of 'late' capitalism.

Insights on the Neoliberalization of the State

Development policy implementation is inherently political because it reorders social relations, economic production and control over natural resources. In-built distributional rules in a neoliberalizing development policy for the drylands around the world interact with inequalities inscribed in local institutions to create a deeply uneven distribution of watershed development. Watershed development embodies 'the intertwined nature of capitalism, industrialization and the bureaucratic nation-state' (Friedland & Boden, 1994). Market-led development is implemented through a process of state regulation and deeper rather than lesser involvement of the state in the drylands. The state itself is the site and actor of neoliberal development, as the neoliberalization of state-owned enterprises and banks demonstrates (e.g. Rudnyckyj, 2008). While private banks and commodity firms operate in urban geographies in which they secure an

adequate rate of return, state-owned banks and commodity enterprises operate in marginal geographies, earning a lower rate of return but advantaged by a web of support agencies in remote regions to achieve the same goals of economic growth and revenue maximization. The state has built synergies between government agencies in semi-arid areas and the cooperative dairy sector and nationalized banks to expand state-owned enterprises' operations. Neoliberal development involves the mutation of boundaries between the state's functions of governance and profit maximization, with the District Rural Development Agency playing a pivotal in linking households to both state-owned commodity firms and nationalized banks. Watershed development is also emblematic of the state's role as the handmaiden of an oligopolistic form of the market since neoliberalization, distinct from policy emphasis on competition in the liberalization era of the 1990s.

The Relationship of Democratic Politics to Neoliberal Policy

The dissertation's findings testify that market-driven development in the drylands is a state-regulated process and relies on political society for implementation. Markets and democracy are intertwined, and democratic institutions are critical instruments of fashioning and legitimizing market-driven development because they secure procedural justice and are conduits of patronage politics. During a period of growing inequality, development is thoroughly implicated in democratic politics given the state's and political parties' imperative to establish legitimacy, largely through the delivery of privatized and expensive capital to leaders.

With the entrenchment of grassroots democratization including the creation of new levels of political representation at the district, block and locality; village panchayat-

, block panchayat- and district panchayat-leaders are new loci for political parties to channel patronage. The lowest level elected local bodies are sites of intense political competition in the drylands, and political competition in the locality intersects with political competition among national parties to channel development patronage to panchayat leaders, the lowest-level political society actors in India.

Elected leaders governed by the priorities of broad-based development in resource-poor communities implement an intervention that threatens to deepen inequality by distributing development differentially. Sarpanches deliver just as much development to a particular voter as the voter's reserve price for delivering her vote. Sarpanches may deliver no resources to groups in a permanent minority, token benefits to those most dependent on them, and the largest benefits to groups that are both numerically powerful and economically wealthy, and least dependent on the outcomes of bargaining outcomes with elected leaders.

Democratic decentralization is considered an instrument of pro-poor development by most scholarship in the field, the argument being that electoral politics lead to elected leaders undertaking broad-based development. Nonetheless, Mahipura's case shows that democracy broadens development in limited ways. Electoral democracy builds but one kind of political capacity, that of suffrage, but may not bring about any significant distributional shift in favor of subordinate groups if these groups lack resources for collective action and if they are subjected to social discrimination. Democratic decentralization may in fact have little impact on distributional equity.

While panchayats are thought of as republics comprising citizens and their elected representatives bound by a contract, the boundary between the state and society is porous

and panchayat leaders and voters bear social identities, which shapes their relations. This calls for rethinking the practice of democratic decentralization and understanding panchayats not as neutral entities but as bodies that are constituted by caste, tribe, gender and capital.

Neoliberalism and its Legitimation

Deepening inequality through neoliberal interventions such as watershed development in the drylands which are inhabited by the vast majority of India's predominant voters who are poor may be sustained by the simultaneous expansion of rural welfare programs and social services, which are deliberate 'exceptions to neoliberalism' (Ong, 2006). Partha Chatterjee's (2008) claim that the rise in state welfare programs after liberalization in India is a result of liberalization immiserating the vast majority of people is suggestive in this regard, and true for many other parts of the world.

Examples of the expansion of welfare programs include the radical four-fold increase in disability pensions in rural Andhra Pradesh in the 2000s and the National Rural Employment Guarantee Act. The National Rural Employment Guarantee Act is emblematic of a deep commitment on the state's part to guarantee wage employment to rural households in the wake of an agricultural crisis precipitated by the withdrawal of state investment in agriculture, the squeezing of agricultural credit throughout the 1990s, the withdrawal of state investment in irrigation; and exposing medium, small and marginal farmers to volatile markets. The phenomenal growth of the urban, professional, service and financial sectors of the economy and ever-greater commoditization, privatization and resource extraction contribute to a remarkable growth rate in the 2000s and generate the resources to channel welfare to rural populations.

The National Rural Employment Guarantee Act itself reveals how neoliberal forces in the state, academe and think-tanks have successfully diluted the National Rural Employment Guarantee Act from providing extensive employment to providing only 100 days' work in a year, from providing employment to every adult to providing employment only to each household, and from employing labor-intensive technologies to allowing up to 40 per cent of expenditures in the intervention to be spent on capital.

To Chatterjee's notion of the state balancing neoliberalism with welfare I add the idea that the inequalities caused by neoliberalism in one arena might be balanced by the equalizing tendencies of neoliberalism in another area. Women's empowerment exemplifies this. The Indian state has recently strengthened women's rights to land, removed labor market barriers against women's participation in night-time work and expanded women's employment in the government. While women form the logical site of action for the patriarchal state to craft disciplined, regulated and useful bodies necessary for the new market economy; women's economic empowerment may also increase their economic agency.

The enactment of entrepreneurial agriculture in resource-poor communities by elected leaders generates fresh insights into the relationship between capitalism and democracy. Capitalism and democracy are regarded as theoretically antithetical- while capitalism is considered to be tolerant of inequality, democracy is considered to be predicated on each person's equal ability to influence the institutions affecting her. However, the relationship between pro-market development policy and democratic politics is far more complicated. Neoliberal development and democratic politics mutually constitute each other- market-driven development generates economic resources

to channel development patronage to local leaders, and political society actors in turn appropriate the material technologies of neoliberal development to enhance their political dominance.

Development subjects accept these distributional outcomes partly because they can do no better than accept these outcomes and partly because capital does not come from some external place to reorder society but interacts with people's aspirations and desires. Like the state and the market, capital in fact has a long genus in eastern Gujarat and is testimony to historical patterns of statemaking, market-integration and accumulation. Capital achieves ends of accumulation, social reproduction and consumption for development subjects, and development subjects' relationship with capital is not necessarily simply antagonistic. Furthermore, people are not just producers but also consumers and have other identities beyond the production-consumption binary. All commodities including the inputs of high-value commodity production have 'other lives and other meanings' (Appadurai, 1986).

The Nature of Institutional Change in Rainfed Areas

The dissertation's findings show that market-based development does not unfold through an internal logic but is produced contingently in contexts shaped by democracy, electoral politics, spatial relations of power, history and the agency of social actors. In Gujarat, the poster-state of the 'success' of both Hindu nationalism and market reforms in India, market-driven development is shaped by the historical context of communal violence in eastern Gujarat, and India's largest political parties' attempts to stake a claim to justice, material advancement, and what constitutes good governance in the state that is the global beacon of the market. Watershed development in Dahod is shaped by the BJP-

led government's attempt to reestablish legitimacy in the district and struggle between the BJP and Congress to stake a claim to delivering pro-poor development in Gujarat.

Market-driven development is produced by actors in the state, political society, market and community, and shaped by the ends of social reproduction, economic advancement and political control. Nationalized banks and enterprises craft markets in credit and commodities and form critical alliances with political society actors including sarpanches, ward members and lineage leaders to integrate semi-arid households into commodity-circuits. Watershed development is shaped by the relative distribution of authority, resources and power between dairies and milk sellers, banks and borrowers, lineage leaders and members, sarpanches and vote brokers, Kolis and Adivasis, dispute-mediators and those governed by them, and well-owners and non-well-owners. Development policy shapes the bargaining advantage of *all* actors not only substantive terms with respect to material technologies, but also in procedural terms or with respect to control over decision-making.

Implications and Recommendations for Development Policy

In the first decade of the 21st century, transnational donors such as the World Bank and the International Monetary Fund, global policy organizations such as the International Food Policy Research Institute and the Consultative Group on International Agricultural Research, and national governments have emphasized market-based agrarian growth in regions and communities that were bypassed in the green revolution, including the uplands, semi-arid areas, rainfed tracts, unirrigated regions, subsistence communities, pastoral communities, small-scale communities in coastal and mountainous areas, and forest-dependent communities (Deaton, 1999; Key & Runsten, 1999; Peters, 2004; Ponte,

2002). Market-based development conjures markets as neutral entities, but markets are simultaneously political and social, and are shaped by relative bargaining advantage between commodity producers and firms. Market-based development also conjures producers as hitherto being subsistence oriented, but as Dahod's case shows, those with capital have always participated in cash-crop production. In the guise of the notion of laissez-faire and the invisible hand, market-based development is in fact a moniker for a particular oligopolistic form of the market dominated by large-scale capital and attenuated capacities for commodity producers to shape crop choices, production processes and prices.

In not only South Asia, Africa, Latin America and Southeast Asia, but also North America, East Asia and Europe, the liberalization of agricultural policy throughout the 1990s and its neoliberalization in the 2000s has emphasized high-value commodity production in high-risk environments. High-value commodity production has adverse implications for biodiversity conservation, natural resource conservation and entitlement to common pool resources for the poorest households. In an era of climate change with the greatest impending adverse effects anticipated for South Asia and Sub-Saharan Africa, and the brunt of detrimental effects falling on subsistence and natural resource-dependent communities, high-value commodity production appears to be a regressive policy prescription from the standpoint of both food security and environmental sustainability.

High-value commodity production is a contributor to the global food crisis currently underway shaped by speculative trading in food-commodity markets (which were deliberately kept out of stock market trade in many countries until recently,

precisely to prevent price-shocks due to speculative trade), conversion of food-crop land to biofuel and high-value commodity production, shift from low-input to input-intensive and water-intensive agriculture, and the decline in smallholders' participation in agriculture worldwide which has contributed to a decline in food-crop production. The poor in developing countries are the worst affected by price-shocks which deepen malnourishment and hunger, already endemic with states' withdrawal in the provision of food security for the poor. High-value commodity production in the locality has adverse implications for the global poor, in both the developing and developed worlds, because of its spillover effect on global foodgrains prices.

Development policy is a specific type of institution that articulates goals, channels resources and creates delivery mechanisms for economic improvement. Watershed development policy constitutes rules which allocate resources for irrigation rather than for drinking water and communal needs, for cash-crop production rather than food security, and for increasing the capacities of those best able to participate in the 'new' commodity production by subsidizing capital. Watershed development allocates decision-making powers to contractual staff, sarpanches and self-help groups' leaders, and provides for no countervailing institutions above the panchayat and self-help groups which members can take recourse to. Institutions matter in policy design because institutions embody power relations and shape distributional outcomes (Knight, 1992). Development policy has distributional dimensions because it shapes access to shared resources on which private economic activity depends, including control over groundwater, surface water, grasslands and forests. While recent scholarship in the social sciences has emphasized 'getting the institutions right' (North, 1990), a more fruitful line

of enquiry entails recognizing institutions as embodying the distribution of power among stakeholders, and the policy incentives required for development that is more just, sustainable and equitable in the present and the future.

Development policy both embodies power relations and configures them; therefore policymakers need to consider the implications of capital-intensive and irrigation-intensive technologies for household well-being and ecological security. The drylands have the highest concentration of poverty in the world (Irz, Lin, Thirtle, & Wiggins, 2001). The drylands are differentiated and while capital-intensification propels better-off households' economic advancement; it undertakes an upward distribution of communal natural resources in favor of wealthier households. The dominant policy turn towards high-value commodity production in rainfed areas may adversely affect the production of less energy-intensive and local foodgrains- maize, millets, barley and dryland varieties of rice are examples from western India, increase local foodgrain prices and hurt food security among marginal farmers and landless households.

Future Research

In closing, I return to recent changes in Mahipura, where Shankar in the main village and Bharat in Bordi have each dug bore wells for commodity production, choosing to tap into aquifers rather than deepen dug wells from which irrigation has to be halted from time to time to wait for the well to be recharged. Other Chauhan families are contemplating digging bore wells. Bore well-deepening is likely to lead to dug-well owners' wells drying up. Shankar and Bharat's well-deepening spree has already precluded the possibility for summer-well-owners and non-well-owners to dig conventional wells and hit water. Incentives created by policy have long-term effects not

only on those at whom they are directly aimed but also in terms of their externalities which affect other social actors. Further research is needed to explore how energy-intensive commodity production interacts with the political ecology of irrigation in semi-arid areas, the impact of cash crop production on local food availability, and changes in food consumption patterns, and impact on social relations in the drylands.

Appendix A: Household Questionnaire

Household number: _____ Date: _____ Hamlet: _____
 Lineage: _____ Tribe/Caste: _____ Village: _____

I am going to ask you questions on your wealth, participation in the recent Hariyali watershed development program, in village affairs and the panchayat. Please answer these questions to the best of your knowledge. If there is any question you do not wish to answer, please feel free to refrain.

1. Tell me about the composition of your household. Enumerate all the people that eat from the same kitchen.

| Name (First and last) | Gender | Age | Educational attainment |
|-----------------------|--------|-----|------------------------|
| | | | |
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| | | | |

Total household calorie requirement: _____ per day.

2. MEASURE OF INCOME:

*Period columns: days, weeks, months, year

Total income from wage work alone: _____

Measure of total market integration: (wage/trade/rental/sale of home production):

Measure of local market integration: (trade/rental/sale of home production):

| Income Source (Describe in Detail) Wage Labor (Casual or Prof) Trade (Not of own goods—only profit from purchase and re- sale) Rental Income Sale of Home Production (Specify Crop, Stock, Milk, Meat, etc.) Cash Remittances (Specify Source) In Kind Remittances (Type&Source) Other (Specify in Detail) | Amount (Corresponding to Period in the Next Column) | Period (Check One)* | | | | Code for Source of Income (1) Wage Labor (2) Trade Profit (3) Rental Income (4) Sale Home Production (5) Cash Remittances (6) In Kind Remittances (7) Other | Calculate Annual Income from this Source |
|--|---|----------------------------|--------------------------------------|--------------------------------------|---------------------------------|---|--|
| | | W E E K L Y | M O N E T H L Y | S E A S O N L Y | A N N U A L Y | | |
| Total | | | | | | | |

3. MEASURE OF WEALTH:

| Wealth Source (All Income Producing Assets) | Number (Acreage, Livestock, etc.) | Code for Wealth Source & Value of one unit | Calculate total value (for income earning assets calculate annual income times life of asset) |
|---|--------------------------------------|--|---|
| Farm Acreage – Dry | | (1) Dry Acreage | |

| | | | |
|---|--|-----------------|--|
| Farm Acreage – Wet | | (2) Wet Acreage | |
| Livestock | | (3) | |
| Farm Equipment (Tractor, Plow, Mill, Generator, Thresher) | | (4) | |
| Rental Property | | (5) | |
| Wells (Bore/Dug, Number, and Share in each) | | (6) | |
| Other Capital Equipment (Sewing Machine, Pipes, threshers etc.) | | (7) | |
| Commercial Vehicle (Truck, Cart, Bicycle, Tractor, Motorcycle) | | (8) | |
| Shop | | (9) | |
| Other (Specify in Detail) | | (10) | |
| Total | | | |

4. Please tell me how much food you got out of your land and livestock in the monsoon season. Tell me about each plot of land, and how much you harvested. Was it a typical harvest?

| Crop | Harvest amount | Kilo amount | Total Calories |
|------|----------------|-------------|----------------|
| | | | |
| | | | |
| | | | |
| | | | |

5. Please tell me how much food you got out of your land and livestock in the winter season. Was it a typical harvest?

| Crop | Harvest amount | Kilo amount | Total Calories |
|------|----------------|-------------|----------------|
| | | | |
| | | | |
| | | | |

6. Please tell me how much food you got out of your land (and livestock) in the summer season. Was it a typical harvest?

| Crop | Harvest amount | Kilo amount | Total Calories |
|------|----------------|-------------|----------------|
| | | | |
| | | | |
| | | | |

Grand total of calories produced: _____

7. Are you a Below Poverty Line household? (Y/N)
What is your ration allotment of foodgrains, oil and sugar?

Total calories: _____

Total calories available for consumption (home production plus ration allotment):

8. Where do you fetch water for domestic use from? How far is your drinking water source?

9. Are you a member of the local milk dairy?

10. Your village has undertaken watershed development. Is anyone in your household a member of a Hariyali Self Help Group? (Y/N) (Code: 1/2)

11. If yes:

| Name | Self-help group | Group taking bank loan? | If yes, loan amount | Asset purchased |
|------|-----------------|-------------------------|---------------------|-----------------|
| | | | | |

| | | | | |
|--|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |

12. Has anyone in your household done wage labor on Hariyali since its inception, such as check wall construction, nursery labor, demonstration plot labor, vermicompost or pond-digging? Please tell in detail. (Code 1/2 for Y/N)

13. If yes:

| Name | Gender | Age | Type of work | No. of days | Wages |
|------|--------|-----|--------------|-------------|-------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

14. Has any of your land benefited directly or indirectly from any watershed development activity such as well recharging, check wall construction, gully plugging, field bunding, nala plugging, tank building/deepening or vermicomposting? Please describe in detail:

| Type of activity | Land area | Wages | Material benefits | Impact on agricultural productivity |
|------------------|-----------|-------|-------------------|-------------------------------------|
| | | | | |
| | | | | |

15. Is anyone in your household or your immediate extended family a member of the panchayat? Please specify.

16. Is anyone in your household or your immediate extended family a member of the dairy cooperative committee? Please specify.

17. Are you a member of the forest cooperative?

18. Do you or your spouse attend village assembly meetings? (Y/N) (Code 1/2)

19. Do you visit your ward member (*sabhya*) for development related questions, or have you in the past two years?

20. Do you visit the sarpanch for development related questions, or have you in the past two years?

21. Do you visit the panchayat secretary (*talati*) for development related questions, or have you in the past two years?

22. Do you visit the block level office for information on government development schemes?

23. Please tell me the names of three people with whom you discuss village-level issues.

| Name | Gender | Age | Tribe/Caste |
|------|--------|-----|-------------|
| | | | |
| | | | |
| | | | |

Thank you for your time and for participating in the survey. I appreciate the information and knowledge you shared.

Appendix B: Lineage Leaders' Interview Schedule

'During household surveys in Mahipura I asked respondents who they would call upon to mediate a dispute on land, wells or interpersonal disagreements. Many respondents stated they would call upon you to resolve a conflict. I will ask you questions regarding your role in dispute mediation.'

Q.1. How do lineage-leaders resolve disputes?

Q. 2. Do disputing parties adhere to the council of elder's verdict or do wrongdoers often repeat an offence? What do you and other agevaans do when an offence is repeated?

Q.3. Everyone in the village is not an agevaan. How did you develop an understanding of what is wrong and right?

Q. 4. Lineage leaders may not see eye to eye in case of certain intractable conflicts. How do dispute-mediators resolve disagreements among themselves?

Q. 5. When did you first resolve a dispute?

Q. 6. You resolve disputes in your lineage and hamlet. Do you also resolve disputes in the rest of the village?

Q. 7. Household disputes, hamlet-level disputes, and village-wide disputes- what are the different rules that apply to each one of them?

Q. 8. If the sarpanch commits wrongdoing, do lineage leaders sanction the sarpanch? If the sarpanch is at fault, what do people do then?

Q. 9. Have you ever contested the panchayat election as a sarpanch-candidate or ward member candidate?

Q. 10. As a lineage leader, do you lobby for development for your hamlet or lineage from the sarpanch?

Q. 11. (To those who were ex-patels) Who in your opinion wields more power- the patel or the sarpanch? How so?

Thank you for participating in the interview.

Appendix C: Micro-Credit Group Leaders' Interview Schedule

1. How did you learn about micro-credit being initiated in Mahipura? How did you join a group?
2. How did you become the leader of your group?
3. Do you hold a meeting every month? How do you organize your group's monthly meetings? Where are they held?
4. Do members contribute regularly? How do you try to ensure that members contribute on time?
5. How do you deposit monies in the bank?
6. How long has the group been carrying out saving? Have members started internal lending?
7. Have you thought of what kind of a loan you plan to secure once the group completes internal lending?
8. Who writes meetings' minutes? How has the experience of writing technical minutes for the group in an official register been? How do you deal with difficulties you encounter in writing minutes?
9. Does the social development expert visit your group to explain hard-to-understand procedures, norms of writing and rules of accounting? Do you have the social development expert's contact information?
10. Have you ever called the social development expert to the village to assist you with book-keeping and group-building? Do you intend to do so in future, or have you thought about doing so?

Appendix D: Micro-Credit Group Members' Interview Schedule

1. How did you learn about micro-credit being initiated in Mahipura? How did you join a group?
2. Why did you choose to join a micro-credit group? What kinds of benefits do you envisage from it?
3. How was the leader of your group chosen?
4. Does your group have a meeting every month? Where is it held? How do you stay informed about them?
5. How long has the group been carrying out saving? Have you started internal lending?
6. Has the group been allotted passbooks? Is a record of your monies entered in your passbook?
7. (If the member has a personal passbook) Do you have your personal passbook with you? If not, where is it kept?
8. Have you thought of what kind of a loan you plan to secure once your group completes internal lending?
9. Does the social development expert visit your group to explain hard-to-understand procedures, norms of writing and rules of accounting? Do you have the social development expert's contact information?
10. Have you ever called the social development expert to the village to assist you with book-keeping and group-building? Do you intend to do so in future, or have you thought about doing so?

Appendix E: Archival Documents

Documents Analyzed at the National Archives of India

Government of India, Home Department, Census Branch, June 1900, Part A, Reference No. 46, No. 58, letter from H.H. Risley, Census Commissioner of India to all Superintendents of Census Operations, dated 26th May 1900.

Government of India, Home Department, Census Branch, August 1900, Part A, Numbers 6-8, Sub: 'Proposal of the British Association regarding ethnography, etc in connection with the census of 1901'.

Government of India, Home Department, Census Branch, November 1900, A-Proceedings, No. 1, Subject: 'Question of undertaking ethnographical investigations at the census of 1901' from the Finance and Commerce Department to Lord George Francis Hamilton, Secretary of State for India, dated 1st November 1900.

Government of India, Home Department, Judicial Proceedings, March 1901, No. 271-272, Sub: Proposal to amend paragraph 3 of Section 5 of the Dekkhan Agriculturists' Relief Act, 1879.

Government of India, Home Department, Public Branch, 1901, Part B. Proceedings for October 1901, Nos. 3/5-3/7, Sub: 'Cattle raid committed by Bhils of Mewar in the Ahmedabad district', letter from officiating Agent to the Governor-General in Rajputana, No. 3754-G, dated 22nd July 1901.

Government of India, Indian Irrigation Commission: Minutes of evidence of the Indian Irrigation Commission for the Native States, 1902.

Government of India, Home Department, Public Branch, 1924, File No. 932/24, Sub: 'Degree of control to be exercised by the Secretary of State and the Government of India over irrigation works in the major provinces'.

Government of India, Home Department, Public Branch, 1939, File No. 45/21/39, Sub: 'Request from the Gujarat Research Society for fuller investigation of certain races of the area known as Gujarat (including Kathiawar and Cutch)'.

Government of India, Home Department, Public Branch, 1941, File No. 45/13/41, Sub: 'Tabulation of caste within the areas under the jurisdiction of the Bombay Government'.

Government of India, Home Department, Judicial Branch, 1930, File No. 546/30, Sub: 'The Bombay Irrigation (Amendment) Act, 1931, Bill No. III of 1931.

Government of India, Home Department, Public Branch, 1930, File No. 141/30, Sub: 'Proposal to prepare a map of India showing the distribution of tribes and castes'.

B. Documents of the Princely States

Bhopal Political Agency, File No. 1196/169 of 1886, Sub: 'Returns of forecast of cotton crop', 1890, Revenue and Agriculture Department, Agriculture Resolution No. 358-369 C, dated the 13th March 1890, Calcutta.

Bhopal Political Agency, Foreign Department Branch, File No. 67. Letter No. 2128 from Captain E. Barnes, Political Agent in Bhopawar to First Assistant to the Agent to the Governor-General in Central India, dated 16/17 May, 1901, Jhabua.

Bhopal Political Agency, Foreign Department Branch, File No. 67. Letter No. 3362 from Captain E. Barnes, Political Agent in Bhopawar to the First Assistant to the Agent to the Governor-General in Central India, Dhar, dated 25th July, 1901.

Bhopal Political Agency, Foreign Branch, File No. 104 of 1902, Sub: 'Board of Scientific Advice', Resolution by Government of India, Department of Revenue and Agriculture, Despatch from His Majesty's Secretary of State for India, No. 10-Rev, dated 17th January 1902.

Bhopal Political Agency General Branch (1830-1904) Part 1, Volume 1, No. 1-1272. File No. 35-A, 1903. Administrative Report of Rajgarh State (1902-03): Memo on concession granted to induce people to take up land for cultivation.

Bhopal Political Agency General Branch (1830-1904) Part 1, Volume 1, No. 1-1272. File No. 35-A, 1903. Administrative Report of Rajgarh State (1902-03), Ref. No. 43, Subject: Rajgarh Affairs: Survey and settlement operations.

Bhopal Political Agency General Branch (1830-1904) Part 1, Volume 1, S. No. 1-1272. File No. 115, 1902. 'Report on natural vegetable foods gathered and used by poor people in years of scarcity or famines'.

Bhopal Political Agency Foreign Department Branch, File No. 115. 1902. Circular No. C/306, 1902. Subject: Natural vegetable foods.

Bhopal Political Agency Foreign Department Branch, File No. 4232/26, 1879: 'Non-intervention of the government in the operations of private trade in times of famine'.

Bhopal Political Agency, File No. 142/38 of 1899, letter titled 'Famine or distress: Weekly reports on conditions of crops' on weekly foodgrain prices from the Superintendent of Pathari State to the Political Agent at Bhopal, Pathari State, dated 7th October 1899.

Bhopal Political Agency, File No. 57A of 1897, Extract from the Proceedings of the Government of India in the Department of Revenue and Agriculture, No. 35-245-26, Sub: 'Resolution on the appointment of a Commission to formulate the experiences of famine and the result of their deliberation' by Denzil Ibbetson, Secretary to the Government of India, dated the 23rd December 1897.

Bhopal Political Agency, File No. 57A of 1897. Extract from the Proceedings of the Government of India in the Department of Revenue and Agriculture, No. 36-240-5, Sub: 'Resolution on the appointment of a Commission to formulate the experiences of famine and the result of their deliberation' by Denzil Ibbetson, Secretary to the Government of India, dated the 30th December 1897.

Bhopal Political Agency, Foreign Department Branch, File No. 67 of 1901. 'Famine in the Bhopawar Agency': excerpts from the travel diary of Lieutenant H. Stewart, Famine Assistant, Bhopawar Agency.

Bhopal Political Agency 1902 No. 36 (Part 2), Administrative Report Narsingarh State: 1901-02.

Bhopal Political Agency 1902 No. 36 (Part 2), Administrative Report Narsingarh State: 1901-02: Administrative Report, Pathari State: 1901-02. Letter from the Superintendent, Pathari to the Political Agent in Bhopal, dated 30th March 1902.

Bhopal Political Agency File No. 4463/102 of 1898. Letter No. 19 C titled 'Gujars in Dholpur State: Operations for Bringing under Control', from the Political Agent Eastern States Rajputana to the First Assistant to the Agent to the Governor General Rajputana, dated 1st April 1898.

Bhopal Political Agency File No. 169 of 1899 No. 942, letter titled 'Using forests as water catchments to raise resources and revenues for agriculture', from the Superintendent, Narsingarh State to the Political Agent in Bhopal, dated the 29th December 1899.

Gujarat States Agency File No. F 920/46, 1946, tour note of A.P.F. Hamilton, Director General of Forests on the Bombay Deccan, to the Government of India in August 1945.

Bhopal Political Agency File No. 1196/169 of 1886, Agriculture Resolution No. 358-359, Revenue and Agricultural Department, Calcutta, dated the 13th March 1890.

Bhopal Political Agency, Finance Branch, File No. 90-742, Resolutions adopted on 'Detailed programs of work for the 'Grow More Food Campaign'' by Mr. N.R. Sarkar, member-in-charge of Education, Health and Lands Department, at the Food Production Conference, New Delhi, 6th April, 1942.

Bhopal Political Agency, 1906, File No. 37, Sub: 'Famine Protective Works: Irrigation', extracts from Mr. Impey's Settlement Report of the Jhansi district for 1893.

Documents Analyzed at the Nehru Memorial Library Archives

All India Congress Committee Papers Microfilm Roll No. 8639 File G-13, Part 1, 3, 4; Resolutions of the meeting of the All India Depressed Classes League held at 9 Fort Road, Allahabad on 22nd October 1939, forwarded by Ram Prasad Jaiswar, Secretary of the All India Depressed Classes League, to Jawaharlal Nehru.

All India Congress Committee Papers Microfilm Roll No. 8607, File No. G-13, T.L. No. 869-R, 1936-37, Congress Socialist Supplement All-India Kisan Bulletin, Kisan Sabha's Program for Peasant Welfare.

All India Congress Committee Papers Microfilm Roll No. 8681 'Kisan Organization' File, File No. ED-7/1947-48 (Part I).

All India Congress Committee Papers Microfilm Roll No. 8681, File G-13, Reference No. A 923/36, letter titled 'Re: The Agrarian Program' from R.R. Diwakar, Honorary Secretary of the Indian National Congress to the President, Indian National Congress, Karnataka Provincial Congress Committee, Dharwar, dated 15th May 1936.

All India Congress Committee Papers Microfilm Roll No. 8634, File No. P 20 (Part2), letter from R.S. Pandit, General Secretary of the United Provinces Provincial Congress Committee, Lucknow to All District, City and Town Congress Committees, dated 27th July 1938.

All India Congress Committee Papers Microfilm Roll No. 8607, File No. G-13, T.L. No. 869-R, All-India Kisan Bulletin 1936-37, Congress Socialist Supplement, Kisan Sabha Newsletter (2), 'Utkal Congress Committee lead on Kisan Question', Bombay, June 29 1937.

All India Congress Committee Papers Microfilm Roll No. 8607, File No. G-13, T.L. No. 869-R, All-India Kisan Bulletin 1936-37, Congress Socialist Supplement, Kisan Sabha Newsletter (2), Utkal Provincial Congress Committee (eastern India)'s resolution adopted on June 14.

All India Congress Committee Papers Microfilm Roll No. 8607, File No. G-13, T.L. No. 869-R, 1936-37, Kisan Bulletin, Bombay, 14 May, 1937, Agrarian File, Kisan Sabha Bulletin entitled 'Police search Bengal Kisan Office'.

All India Congress Committee Papers Microfilm Roll No. 8635, File No. P.L. 13/1938 (Part II) through File No. 6/1938, letter regarding peasant rally in Allahabad from the Collector, Allahabad, United Provinces to Jawaharlal Nehru, All India Congress Committee Office, Allahabad.

All India Congress Committee Papers Microfilm Roll No. 8648, Congress disseminated a questionnaire on national planning to 'Provincial Governments, Indian states,

Organizations of Trade, Industries, Commerce, Labor and agricultural Interests, firms and corporations' asking in File G-23/1940 (KW-2)

All India Congress Committee Papers Microfilm Roll No. 8681 Congress rhetoric on its objectives addressed to members of the NPC, File No. ED-7/1947-48 (Part I),

All India Congress Committee Papers Microfilm Roll No. 8639 Note on the function of the Irrigation Branch, Public Works Division, United Provinces, and its potential contribution to national economic planning", File G-14/1939 Part III. National Planning, 1939-40, the Congress stated

All India Congress Committee Papers Microfilm Roll No. 8648, File G-23/1940 (KW 2), Proceedings of the Economic Planning Committee Meeting chaired by Jawaharlal Nehru on 11the December 1947 at Council House, New Delhi.

Appendix F: Buffalo-loan Repayment at Two Percent Interest Compounded Monthly

| Month | Principal | 2 per cent interest compounded monthly | Principal due at the end of the month | Milk payment deducted per month | Principal at month's end |
|--|-----------|--|---------------------------------------|---------------------------------|--------------------------|
| <u>First calving</u> | | | | | Principal reduces |
| One | 14,000 | 1.020591825 | 14,288 | 720 | 13,568 |
| Two | 13,568 | 1.020591825 | 13,847 | 720 | 13,127 |
| Three | 13,127 | 1.020591825 | 13,397 | 720 | 12,677 |
| Four | 12,677 | 1.020591825 | 12,938 | 720 | 12,218 |
| Five | 12,218 | 1.020591825 | 12470 | 720 | 11,750 |
| Six | 11,750 | 1.020591825 | 11992 | 720 | 11272 |
| Seven | 11272 | 1.020591825 | 11504 | 720 | 10784 |
| Eight | 10784 | 1.020591825 | 11006 | 720 | 10286 |
| Nine | 10286 | 1.020591825 | 10498 | 720 | 9778 |
| Ten | 9778 | 1.020591825 | 9979 | 720 | 9259 |
| Eleven | 9259 | 1.020591825 | 9450 | 720 | 8730 |
| Twelve | 8730 | 1.020591825 | 8910 | 720 | 8190 |
| <u>First calving interval= 15 months</u> | | | | | Principal increases |
| Thirteen (Dry) | 8190 | 1.020591825 | 8359 | 0 | |
| Fourteen | 8359 | 1.020591825 | 8531 | 0 | |
| Fifteen | 8531 | 1.020591825 | 8706 | 0 | |
| Sixteen | 8706 | 1.020591825 | 8886 | 0 | |
| Seventeen | 8886 | 1.020591825 | 9069 | 0 | |
| Eighteen | 9069 | 1.020591825 | 9255 | 0 | |
| Nineteen | 9255 | 1.020591825 | 9446 | 0 | |
| Twenty | 9446 | 1.020591825 | 9641 | 0 | |
| Twenty-one | 9641 | 1.020591825 | 9839 | 0 | |
| Twenty-two | 9839 | 1.020591825 | 10042 | 0 | |
| Twenty-three | 10042 | 1.020591825 | 10248 | 0 | |
| Twenty-four | 10248 | 1.020591825 | 10459 | 0 | |
| Twenty five | 10459 | 1.020591825 | 10674 | 0 | |
| Twenty-six | 10674 | 1.020591825 | 10894 | 0 | |
| Twenty-seven | 10894 | 1.020591825 | 11119 | 0 | |
| <u>Second</u> | | | | | Principal |

| | | | | | |
|------------------------------------|-------|-------------|-------|-----|---------------------|
| <u>calving</u> | | | | | reduces |
| Twenty-eight | 11119 | 1.020591825 | 11347 | 720 | 10627 |
| Twenty-nine | 10627 | 1.020591825 | 10846 | 720 | 10126 |
| Thirty | 10126 | 1.020591825 | 10335 | 720 | 9615 |
| Thirty-one | 9615 | 1.020591825 | 9813 | 720 | 9093 |
| Thirty-two | 9093 | 1.020591825 | 9280 | 720 | 8560 |
| Thirty-three | 8560 | 1.020591825 | 8736 | 720 | 8016 |
| Thirty-four | 8016 | 1.020591825 | 8181 | 720 | 7461 |
| Thirty-five | 7461 | 1.020591825 | 7615 | 720 | 6895 |
| Thirty-six | 6895 | 1.020591825 | 7037 | 720 | 6317 |
| Thirty-seven | 6317 | 1.020591825 | 6447 | 720 | 5727 |
| Thirty-eight | 5727 | 1.020591825 | 5845 | 720 | 5125 |
| Thirty-nine | 5125 | 1.020591825 | 5231 | 720 | 4511 |
| <u>Second inter-calving period</u> | | | | | Principal increases |
| Forty (Dry) | 4511 | 1.020591825 | 4604 | nil | |
| Forty-one | 4604 | 1.020591825 | 4699 | nil | |
| Forty-two | 4699 | 1.020591825 | 4795 | Nil | |
| Forty-three | 4795 | 1.020591825 | 4894 | Nil | |
| Forty-four | 4894 | 1.020591825 | 4995 | nil | |
| Forty-five | 4995 | 1.020591825 | 5098 | nil | |
| Forty-six | 5098 | 1.020591825 | 5203 | Nil | |
| Forty-seven | 5203 | 1.020591825 | 5310 | Nil | |
| Forty-eight | 5310 | 1.020591825 | 5419 | Nil | |
| Forty-nine | 5419 | 1.020591825 | 5531 | Nil | |
| Fifty | 5531 | 1.020591825 | 5645 | Nil | |
| Fifty-one | 5645 | 1.020591825 | 5761 | Nil | |
| Fifty-two | 5761 | 1.020591825 | 5880 | Nil | |
| Fifty-three | 5880 | 1.020591825 | 6001 | Nil | |
| Fifty-four | 6001 | 1.020591825 | 6124 | Nil | |
| <u>Third calving</u> | | | | | Principal reduces |
| Fifty five | 6124 | 1.020591825 | 6250 | 720 | 5530 |
| Fifty six | 5530 | 1.020591825 | 5644 | 720 | 4924 |
| Fifty seven | 4924 | 1.020591825 | 5025 | 720 | 4305 |
| Fifty eight | 4305 | 1.020591825 | 4394 | 720 | 3674 |
| Fifty nine | 3674 | 1.020591825 | 3750 | 720 | 3030 |
| Sixty | 3030 | 1.020591825 | 3092 | 720 | 2372 |
| Sixty one | 2372 | 1.020591825 | 2421 | 720 | 1701 |
| Sixty two | 1701 | 1.020591825 | 1736 | 720 | 1016 |
| Sixty three | 1016 | 1.020591825 | 1037 | 720 | 317 |
| Sixty four | 317 | 1.020591825 | 324 | 720 | Earn 396 |

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