Gold-based Spectrums in a South Indian Silk Producing Hub:
Relating continuums of accumulation, vulnerability, and wellbeing

Final report of the project <<Silk Societies, Gold Stories: Using Gold-Based Life Stories to Study Gender, Financial Inclusion, and Work Vulnerability in South Indian Sericulture>> for

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1. Introduction

This report presents gold-based life-story interviews with stakeholders in the silk industry of Karnataka, towards understanding how liberalisation policies have impacted gender relations and work vulnerability. The interviews, designed to complement a survey of production in the sector, have paid particular attention to the acquisition, ownership, and divestment of gold.

The spatiality and social organisation of the silk industry makes it an interesting case to study the impact of liberisation policy which critics have argued has widened inequalities by disproportionately benefiting already powerful social groups, concentrating growth in urban centres, and leading to a feminisation of vulnerable work (Garikipati and Pfaffanzeller 2010). The industry spans rural, semi-urban, urban locations connecting agrarian contexts to semi-urban with clusters of production units, to pockets of vertically integrated firms located in the heart of urban metropolitans. The sub-processes are rigidly segregated by caste, class, and religion; the Hindu land-owning castes dominate sericulture, lower class Muslims and Dalits both are both employers and employees in silk-reeling, relatively better off Muslims and Hindus are engaged in the cleaner process of silk-twisting, Hindu weaving castes dominate the handloom and power loom sectors, and both weaving and merchant castes control silk retailing.

Narratives around gold offer a way of understanding gender relations in the context of other social structures governing labour and economy. Gold jewelry is gendered in its aesthetic and also is a gendered asset - being an important form of women's savings and making up a high proportion of assets controlled and liquidised by women (Guérin 2014). More broadly, gold is an important store of value in India, and also has a range of social, spiritual, and political functions. The gold-based life stories collected from stakeholders across the silk industry reveal the variations in – and the similarities between - the financial histories of the distinct social groups amongst which the each stage of silk production is divided. The narratives point to ways in which accumulation in the industry has been regulated by the state, by the politics of markets for factor inputs and finished products at each stage of production, by social structure. The multiple ways in which gold is used, and valued, make objects of jewelry sites of accumulation imbued with the intersections between the complex of factors that determine the ability of an individual stakeholder to accumulate a surplus on the labour or the capital that they invest in the sector.

This report makes the case that the variations within each sub-sector of the silk industry are as interesting and as important as the variations between sub-sectors because they point to the highly diverse nature of capital accumulation in the informal economy in India. Descriptions of losses of gold in the silk-reeling industry, immediately following the opening of markets to Chinese silk, which forced employers to seek employment in other units pointed to the need to see labour and capital not as polarised groups but fluid categories between which individuals can move. Paying careful attention to the relationship between gold holdings and other more gradual movements, from being an employer to being employed and vice versa, suggests that individuals might existing along a dynamic spectrum ranging from those who are forced to sell their labour under precarious conditions and those who are able to accumulate a surplus. Reciprocal relationships appear to exist between the value of gold holdings and work vulnerability – and this is further mediated by vulnerability in social relationships. Gender norms – stipulating dowry requirements, defining appropriate women's work as well as the division of reproductive tasks in the household, and regulating women's movement outside the home, among other things – affect the work vulnerability of men as well as women.

Gold Ownership, Gender, and Vulnerability in the Silk-reeling Industry

The silk-reeling town studied has over a thousand home-based production units worked by labour and entrepreneurs from the marginalised Muslim and Dalit communities. Reeling work is hazardous and is seen as unclean; the sector has historically been highly volatile and particularly risky because it requires expensive raw materials but has low profit margins. In the silk-reeling industry, flows of gold link production and reproduction explicitly. A significant proportion of savings of labour and capital tend to have been invested in the form of gold, often mandated by social norms – and gold is mortgaged frequently to finance purchases of the expensive silk cocoons.

The opening up of the Indian market to imports of Chinese raw silk corresponds with huge losses of gold holdings of local entrepreneurs who invested in raw materials before the market for the finished product crashed and so lost their working capital. A decade later, there is a great diversity in the degree to which firms have been able to recover from the initial financial shock. The peak in gold rates in 2008, corresponding with the world financial crisis, means that stocks of wealth held as gold have multiplied in value, so individuals who held gold have larger asset holdings while those who lost gold struggle to acquire it at current prices.

Narratives of gold ownership capture the widespread financial shock caused by the opening of markets; women from business families describe pawning all their gold at this time and illustrate the fact that they haven't recovered even a small amount saying, "our ears have been empty since then". Other stories explain the difference in abilities of families to hold gold based on social, political and economic power; the widening inequality between producer households; the willingness of families with higher assets to give larger "advances" to labour and the transfer of marginalisation to labour where producers face losses; the struggles of fathers to meet higher dowry demands for their daughters marriages at the new gold prices and related vulnerability in debt contracts: the ability of employees to start their own businesses with gold they receive as dowry; and cases of pawning of a woman's gold by an unsupportive husband, obligations to lend gold to friends or family who don't return it. The diversity of cases illustrate the widespread reproduction of vulnerability caused by liberalisation policy in relation to the complexity of the impact of broader gender norms on both men and women and to the politics of resource allocation within households.

Instances of movement from being employers to working as hired labour or vice versa, mark cases of changes in asset-holdings, which are easy to identify and are important to understand factors that push individuals into, or out of, work vulnerability. However, being able to understand more subtle accumulation or dis-accumulation over time is equally important in the informal economy in India where the nature of petty commodity production is such that, scholars argue, individuals who appear to own their means of production may in fact be self-exploiting their own labour (Harriss-White 2014).

Tracing cases in the silk-reeling industry where working capital is purchased by pawning gold makes it possible to identify these cases. Where entrepreneurs make less than a living wage after paying interest on their gold loans it appears that capital accumulation is by the pawn broking institution collecting interest on the capital lent against gold rather than by the entrepreneur.

Stakeholders in the silk-reeling sub-sector, occupy positions on a spectrum that ranges from those who are forced to sell their labour under precarious conditions and those who are able to accumulate a surplus on their labour or capital. Using the idea of the spectrum that narratives from the silk-reeling sub-sector highlighted, the stories of stakeholders in the other sectors can also be analysed in terms of locating them at different positions across a similar spectrum.

Silkworm-rearing and Silk Weaving:
Sectors with their own spectrums of power and vulnerability

Silkworm rearing and silk weaving are both activities that have been perceived to have a less negative status than silkworm-rearing and have historically been less vulnerable forms of livelihood generation. Listening to gold-based life-stories of stakeholders in these sectors reveals both the implications of their relatively stable social and economic positions and the significant differences between stakeholders in each sector. The narratives reveal the particular dynamics of each sector – downturns caused by policy decisions, market demand, environmental factors – and they also reveal spectrums of power – variations in accumulation between owners of land or looms, contractors, subcontractors, and labour –within each sector.

The stories from the silk-worm rearing sector highlight the differences in accumulation between owners of irrigated land, owners of dry land, individuals who subcontract or sharecrop land and those who work as employees on land owned by others, over time. Individuals describe the existence of a feudal system, where families tilled the land and paid rent to the landowners, as well as the existence of agrarian servitude, where '*Jeethedhars*' as they were called were bonded to a family, worked without a wage and were at the beck-and-call of the family with whom they lived, up to the 1950s. The existence of these arrangements reduced significantly after land reform legislation, transferring lands to the tiller, came into force. Landowners then began to hire labour on a daily wage basis to safeguard their land holdings, casualising agricultural labour.

Discussions of technological advances, disseminated by the Department of Sericulture, leading to increases in productivity and lower labour requirements in the last two decades, mark all narratives from the silkworm-rearing sector. Epidemics of infection in the worms point to periods of downturn – particularly in the late 1980s and early 1990s – as does the fall in demand related to the entry of Chinese silk as well as the limitations to productivity caused by water shortages. These factors have led families choosing to cultivate alternate crops – or in some cases to move out of agriculture. The number of families engaged in sericulture has fallen in the last decade, and of the families that remain, the share of total income that comes from sericulture has fallen. Booming land prices have reconfigured the local economy, as have work opportunities outside the villages and alternative livelihoods in small-scale milk production within the village. Despite the much lower demand for agricultural labour in sericulture, landowners complain bitterly about the labour shortage. Those who continue to do this work often represent the most vulnerable groups, who don't have the social ties to find better paying work in the city, or who are tied to the village because of family responsibilities, often women with young children and older women without family support.

Weaving in South India has been highly stratified for the last two centuries. Complex arrangements linking markets, master-weavers, independent weavers, and 'coolie' weavers (who worked for a daily wage), were the norm and the ability of each to accumulate a surplus, or even to earn a living wage, varied significantly (Basille 2010; DW Karuna 2014). Contemporary silk weaving continues to be hierarchical, with the almost complete move to power loom weaving over the last four decades widening gaps between different groups.

The central market areas of Bangalore city were well-known silk weaving and silk retailing hubs. Weaving was spread across numerous home-based units, which used family and hired labour. Both peaks and slumps in demand saw migrations of skilled weavers from neighbouring states to Bangalore. Some individuals came in search of opportunity in what was a hub both for raw materials and sari-retailing, others came as a survival strategy, during times of war when demand in the India economy slumped, or under other circumstances when their incomes in their home-town were threatened. There is a great diversity in the backgrounds of weavers who came to the town – and a great diversity in the trajectories their lives took. Some weavers who entered as wage labourers have been able to accumulate significant capital, including valuable land, education for their children, and gold, while others struggle to meet daily needs with the daily wage for which they labour.

Many weavers who had access to capital have invested in power looms since the 1960s – and simultaneously weaving has moved out of the home and into dedicated workshop spaces, sometimes on the same premises. The owners of power looms might run the workshops themselves, usually with hired labour rather than family labour, or they might rent the looms out to someone else to manage. In other cases they provide raw materials and pay a fixed piece-rate for the finished product to other weavers who chose this arrangement because they don't need to invest in the expensive silk yarn, they get a steady supply of raw materials and don't have to worry about marketing their finished product. Other weavers work as labour in power looms and in the few handlooms that still exist.

Weaving is almost entirely a men's activity; women only contribute to subsidiary tasks of twisting and reeling silk yarn before it is loaded on to the loom. These subsidiary tasks were earlier carried out by the women of the family who did this work in addition to reproductive tasks in the home. Now this work is done by hired labour, usually women from other weaving families who are forced to seek work outside the home.

The silkworm-rearing and silk weaving sub-sectors, like the silk-reeling sub-sector, are highly stratified. Narratives indicate the ways in which policy changes pertaining to labour, initiatives of the Central Silk Board, changes in market demand, changes in value of assets, changes in access to alternate employment have all interacted with the structure of social institutions, contributing to continuities or creating changes in these hierarchies. Gold-based narratives allow a particular understanding of the contributions of gender based vulnerability to the creation of the spectrum between those who labour in precarious conditions and those who are able to accumulate a surplus, in these sub-sectors, as they do in the silk-reeling sub-sector.

Gold-based Savings and Gold-mortgages: Schemes Available and Strategies Employed

Examining the ways in which individuals use gold-based saving schemes and gold mortgage schemes and the ways in which gold-based accumulation and liquidation of assets relate to other financial practices, suggests that this may also complement the idea of the spectrum of work vulnerability. The relationship between gold holdings, work vulnerability, and the choice of, and access to, particular saving or mortgage schemes, seems to further nuance the discussion of factors, which contribute to accumulation and dis-accumulation.

Gold-mortgages happen through various formal and informal institutions. Clusters of gold retail cum pawn broking establishments exist today – with shop signs reading 'Jewellers and Banker's." Almost all banks in the region today offer loans against gold and more recently numerous financial corporations, which primarily deal with gold loans, have also been established. In addition, gold may be given as collateral for loans from family members and friends.

Some individuals have a particular preference for where they will mortgage their gold, others may use different institutions for different kinds of mortgage – short or long term, small or large amounts – strategically juggling between credit sources.

Though jeweller-pawnbrokers charge a higher interest rate many individuals chose to pawn seek mortgages from them because of familiarity with the lender and with the quick, simple process of obtaining a loan. Though pawnbrokers are seen as being exploitative – the personal service they provide is valued by many as is the flexibility they offer. Many individuals spoke of how pawnbrokers understand if you cannot make a monthly payment or take longer than the stipulated time while banks and other institutions have fees for late payment and don't extend the repayment tenure, retaining the gold instead.

Banks and financial corporations charge lower interest rates, and some chose to borrow money from them instead, especially for long term borrowing against larger amounts of gold. From the narratives gathered it appears that individuals who are better educated are more able to negotiate the paperwork and understand the mechanism of bank and financial corporation lending. These individuals could also be more likely to have contacts, within these institutions, who can help them with the procedure. Often loans made by these institutions are used for secure, productive investment and individuals are more certain that they can meet the monthly payments.

It appears that the variation in the choice of institution with which an individual mortgages their gold could relate to the amount of gold they own and where they are on the spectrum between those who are forced to sell their labour under precarious conditions and those who are able to accumulate capital. In addition, the choice of institution and the terms of interest could impact whether or not they are able to reclaim their gold or to make a profit on any investment made with the gold, after paying interest on their loan; they can determine whether entrepreneurs who earn less than a living wage after they deduct interest payments from their profits are self-exploiting their own labour while the institution which lent them the money earns the returns from capital. A careful evaluation of the choice of schemes based on gold holdings and total assets; the terms of borrowing; the consequences or out come from making the borrowing, in numerical terms, could be a project for further research.

Photo Spread 1: Silk Production Stages

COCOON PRODUCTION

Young silk worms

A family that used to be engaged in Sericulture

REELING

Cottage-basin silk-reeling

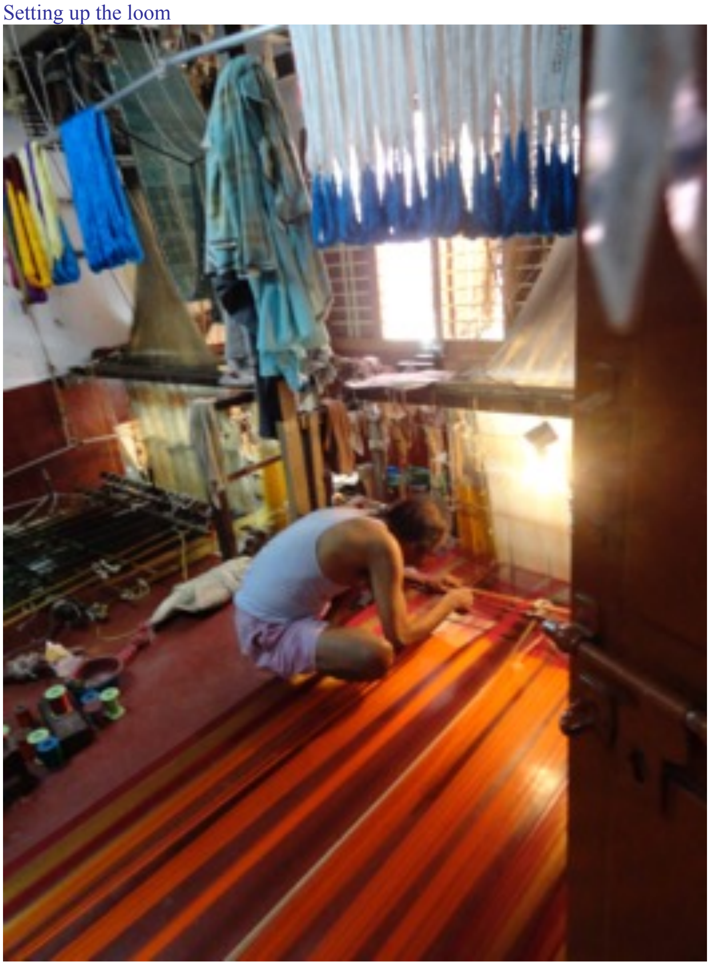
Photo credit: Sabine Hornig

Silk twisting unit

Photo credit: Sabine Hornig

SILK WEAVING

Setting up the loom



Weaving

An almost complete saree

Photo credit: Sabine Hornig

Photo credit: Sabine Hornig

2. Background and Rationales

Gold-based Life-stories - Financial Histories embedded in Socio-economic Contexts

Gold was chosen because it is both an important store of value in India, and a material that is valued in multiple, interconnected, ways. In addition to being fundamentally linked to debt and stocks of wealth, because of its many forms of significance, gold also serves as a marker that will be used to locate and track memories of financial situations and financial behaviour over time. In tracking finances in this way the interest was to try to understand how debt-based labour arrangements in the sector have changed in the lived, remembered, histories of stakeholders. Particularly, to locate the ways in which such labour arrangements have been reinforced or reconfigured following economic liberalisation policies. The intention was to understand how larger trends of genderisation of vulnerable work, on the one hand, and gendered financial inclusion policy, pursued through self-help groups (SHGs) and commercial micro-finance, on the other, have impacted links between social hierarchies and workforce vulnerability.

The process of understanding the semantics of the relationships between gold ownership - with all its complexities and multiple significances - and debt, benefits from consideration of the work of Appadurai (1986) on the study of materiality, which he defines as the study of the relationship between objects and social relationships - of how objects assign value to relationships and relationships assign value to objects. Appadurai suggests that goods perceived as “luxuries” not be dismissed as “unnecessary” but rather that their “rhetoric” and “social” significance be viewed as incarnated signs responding to a fundamentally political necessity. The qualitative work of Veer and Fernandez (2003) around ways understanding the use of jewelry in a Hindu wedding, which was based on semi-structured interviews with members of one family while they organised a wedding, contributed to further defining the forms of value that will be identified.Combining insight from the literature Veer and Fernandez (2003) interacted with and the data they gathered with the theoretic frame Appadurai (1986) offers suggests that forms of value that could initially be identified in the gold stories are:

i. Functional: where jewelry serves as store of wealth, and as a way of meeting the requirements of status (Gell 1986).

ii. Relational: where jewelry enables public and private displays of status (Minturn 1993).

iii. Indexical: where jewelry serves as connection to extended family (Belk and Mehta 1991), to caste group, and/or religious group.

iv. Spiritual: where jewelry and its relation to the person takes on symbolic value or is associated with a sense of sacredness (Venkatesh 1995).

The multiple ways in which gold is valued and connected to women’s lives was seen to offer ways to locate respondents, and debt relations, that are deeply embedded in the broader, textured, contexts of their lives and social institutional affiliations. Life stories around gold were seen as a way to gain insight into how religious and caste based practices, the particularities of gender relations, and the complexities of class hierarchies, relate to workplace vulnerability and financial inclusion.

Methods

Women who agreed to share their life stories in terms of gold ownership were guided to map their lives chronologically, first listing various pieces of gold jewelry that they owned from birth to the present. Then they were be asked to share stories associated with each of the pieces described - including the acquisition, wearing, safekeeping, mortgaging, gifting, at every stage of their lives. They were asked to share reflections on the motivations, pressures, rationale behind each transaction involving gold jewelry towards gaining understanding of the logic with which investment in, or the divestment of gold, is made, and how gold interacts with other assets, other forms of credit and debt. Where relevant the "life stories" of the pieces of jewelry were also sought in order to track previous and future ownership to get a sense for patterns in inheritance, the logic of mortgaging and reclaiming gold for consumption smoothing (Guérin et al 2011), the negotiation of demands for dowry and its relationship to the empowerment of women.

In terms of methodology, the objective of this project was to develop a practice that combines insight and methods from oral history and material culture towards collecting economic biographies of individuals, which will complement qualitative surveys of institutions and their histories. The intention is to build a sense of the scope of gold-based life stories in contributing to gathering information about financial practices over time, retrospectively, and to gauge their value as remembered information.

3. Participants

i) Study population

This study sought contributions from stakeholders in the Karnataka silk industry. In particular it focused on four sites:

- Four villages in a district with mulberry production and silkworm rearing units
- A town with silk reeling and twisting clusters
- Four urban neighbourhoods where hand and power looms are located
- An urban market where raw silk and saris are traded

At these sites participation was sought from:

-Owners of units
-Labour
-Subsidiary firm owners and labour
-Representatives from the sericulture department, the local state, and other relevant social and regulatory bodies

ii) Screening and Inclusion/Exclusion Criteria

The study used a snowball sampling strategy - starting with a few nodal contributors and following referrals offered by them. Since the project employed a qualitative case study based approach to understanding the questions raised while navigating referrals selections may be made to understand the impact of certain variables on the questions being raised.

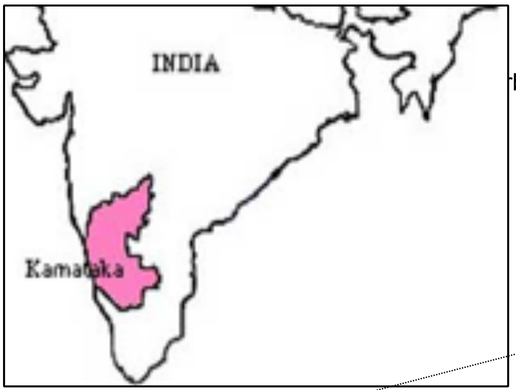
In terms of production units this meant selecting establishments with differing -

-Lengths of time since origin
-Types of technology being employed
-Number of units owned
-Number of machines owned
-Number of machines in operation
output
-Proximity to home site of owners
-Ratios of family to non-family labour
-Presence of other family members in the industry
-Ratios of debt-based to non debt-based labour contracts
-Value of employer advances
-Religion of owners, other social-institutional affiliations
-Affiliations to the local state, and other governing and regulatory bodies
-Location within the cluster
-Access to credit, utilities, markets for raw materials, markets for finished goods

In terms of selection of sericulture employees it meant approaching individuals with differing-

-Social institutional affiliations - religion, caste, gender, age, language etc
-Affiliations to the local state and other governing and regulatory bodies
-Geographic region of origin
-Alternate skills
-Past jobs
-Occupations of family members
-Size of advances held

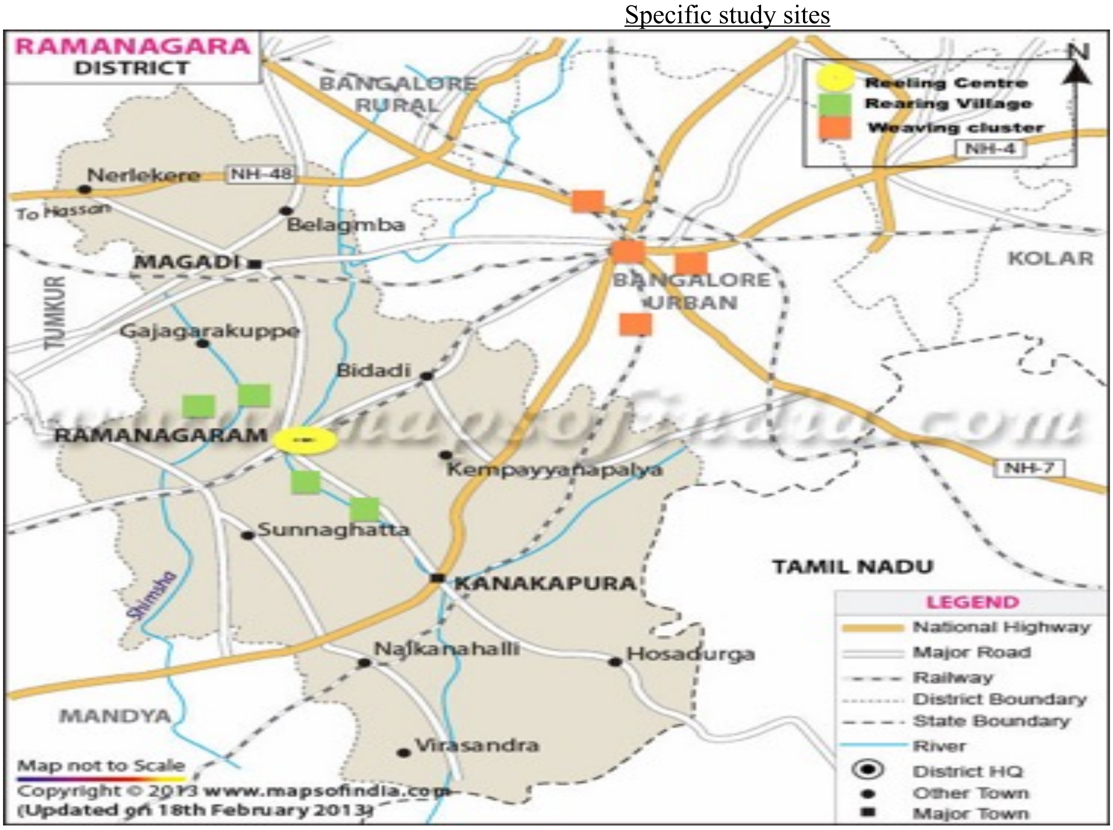
This study concentrated on the silk reeling sub-sector for a number of reasons. Firstly, silk reeling is the largest sub-sector in the state, and is the stage of production that the state specialises in. Cocoons from other states come to markets in Karnataka and weavers in other states then buy the raw silk yarn produced. The majority of saris sold in the Karnataka markets come from other states. Additionally the silk-reeling cluster employs vulnerable labour largely from religious minority communities and lower caste groups. The practice of giving advances on hiring has become an important part of the way labour contracts are negotiated in silk-reeling, perhaps increasing in importance over the last decade as a result of the shrinking labour force with people opting to migrate or travel outside the cluster for alternate work and children leaving the workforce both because of the enforcement of child labour laws and the perceived need for schooling.



ban and Ramanagaram districts which are at the

Study districts: Bangalore Urban and Ramnagara

Specific study sites



Map Source: www.mapsofindia.com

Silk Production in South India

The silk industry as it exists today is the result of over two centuries of growth - shaped and supported by the interests of various governments - preceding British colonial control of the region and following the independence of India. The industry has had global influences since its earliest days and has been inter-linked with society, economy, and politics of the region in important ways. Understanding how the history of silk production in the town relates to the broader politics interests that have influenced the silk industry, allows an understanding of the precise impact of liberalisation on the industry. Seeing liberalisation as a withdrawal of state protection the sector after two centuries of active support allows an appreciation of its implications not only in terms of how it impacts the financial feasibility of the sector but also how it affects the way stake-holders make assessments of it's scope and its future.

Though silk was being produced in India many centuries earlier, the initiation and early institutional support to the now renowned Mysore silk industry is attributed to Tipu Sultan, the son and heir of a Muslim commander who ousted power and became the ruler of Mysore in 1778. During Tipu's twelve year reign a delegation from China is supposed to have visited his state and presented him with a piece of silk cloth which inspired him to produce the material in his Kingdom. Delegations were sent to Muscat in Oman to learn the art of producing silk and also to bring back silkworm cocoons in the 1780s and the production of local began, amidst many battles being waged against colonial armies in the region, and grew with the support from a team of seven hundred experts trained in sericulture brought in from the eastern Indian state of Bengal (Kirkpatrick 1811). In 1799 Tipu lost control of his kingdom to the British, but the industry managed to revive itself under the new powers who were also interested in silk production by then. The colonial period saw a range of institutional measures being put in place to encourage silk production including the invitation of experts from Italy and Japan to assess the local industry and suggest technological innovations and more imports of silkworms and mulberry, this time from Japan. The industry faced multiple setbacks - as a result of infections affecting the silkworm population and also as a result of fluctuations in demand - but though there were periods of out-migration and times when it seemed it would come to a standstill (Rice 1897) it continued to grow over time.

Following independence sericulture was promoted as an important livelihood generating activity and as potential commodity to export both by the state government of Mysore, subsequently renamed Karnataka, and the central Ministry for Textiles. The Central Silk Board (CSB) was established as a national organisation dedicated to govern the sector - it's scope covering the development and management of markets for raw materials and finished products, research and development in technology for silk production, and assessing the livelihood impact of changes in the industry providing subsidies to various sub-sectors. Nehruvian industrialisation and protectionist policies had impact on the industry in the 1970s. Not only did the industry see an inflow of reeling technologies which made the sector more efficient, but the boom in the silk sari industry attributed to the new middle classes emerging as a result of the Green Revolution (Basille 2014, Arrivukkarasi 2014), and import substitution policies protecting the industry resulted in a growing demand for raw silk un-threatened by external markets.

Significant development aid was directed to the industry in the 1980s. When the Swiss Agency for Development and Cooperation (SDC) approached the Government of India to express interest in contributing funding 'to support the uplift of the rural masses' (Sinha and Sagar 2005) one of the industries chosen for them to support was sericulture, including interventions in Karnataka and specifically in the region. The World Bank invested USD 54 million in increasing raw silk production, improving quality and supporting research and development under the aegis of the Karnataka Sericulture Project (KSP) and the later National Sericulture Project (NSP) also allocated funds to the state. Schemes under the World Bank project addressed Mulberry production and silkworm breeding and rearing to improve supply of raw materials to reeling and supported the implementation of Multi-end Reeling units to improve raw silk output.

The Silk-reeling Sub-sector

Reeling in the town studied: A history of vulnerable work

The manufacture of silk cloth is dependent on multiple stages which require very different skills and raw material inputs - from the early days of the industry these stages have been divided across geographic regions but also along caste and class lines. Initially sericulture production was typically carried out by the land-owning Hindu castes and upper caste Muslims who had the acreage required to grow mulberry to feed the worms (Charsley 1990) and sari weaving was practiced by the Hindu Devanger Chettiar caste (Ramaswamy 2006), reeling was dominated by lower class and caste Muslims in the region (Mayoux 1992). Colonial documentation from the region describes "the production of raw silk, (as) an industry confined to the Muhammadans" (Rice 1897).

Four phases of growth of the sector in the town can be identified between 1800 and 2000, reflecting the influence of political contexts - and also social structures of the economy. For the first century both sericulture and silk-reeling took place in the town. In a Gazetteer of the state Rice (1897) wrote that "raw silk is produced … and exported and total production is estimated at 1,850 maunds, valued at nearly 3 lakhs," in the study town and it's neighbour, and also that - "the Mussalmans here are largely engaged in the rearing of silkworms. This industry was brought nearly to a standstill by disease, which for some years destroyed the insects: those engaged in it migrating in large numbers to the coffee districts. But the industry has now revived."

In the early 1900s lower class and caste Muslims continued to dominate reeling in the town. Charsley and Karanth (1998) analyse the dual relationship between caste and occupation in the town with the lower caste groups being engaged in the work and engagement in the work further contributing to being labeled as untouchable. In this period the work continued to be mostly on hand-charkas with little movement towards filature technology, though it was already being imported by the British administration and being employed in nearby towns. The high capital required and the uncertainty in the industry may have contributed barriers to the lower income group's acquisition of this technology. At this time, with the Indian independence movement, there was also a discursive political support for hand-based work using family labour. Accounts from older reelers in the town refer to this and liken the two technologies calling their hand-reeling spindle "a kind of Gandhi-thatha charka" and saying, "we used to spin silk like Gandhi was spinning cotton".

By the second half of the twentieth century - in the post-Independence and post-war period, the growing town crowded out sericultural activity and the town became known as a silk-processing hub. Mechanised charka and filature technology as employed in the region, increasing output and increasing reliance on hired labour. The dry heat in the cluster is one of the reasons to which its early growth and success was attributed, because silk yields per kilo of cocoons are higher in warm weather. The same conditions also negatively impact local agriculture, local farm lands were irrigated by the Arkavathy river that flowed through the region to Bangalore but the river dried over this period making the farmers dependent on irregular rains, and pushing a vulnerable local population out of agricultural work. Migrations from other parts of the state can also be linked to the search for non-farm work as rain-fed agriculture in the state, which has the second highest acreage requiring dry-land agriculture after the desert state of Rajasthan, has been shedding labour.

This period saw families from higher income, higher caste groups earlier engaged in agriculture moving into the sector, running production units in managerial capacity with hired labour, using social ties to source raw materials. However following the regulation of cocoon markets these groups lost control of the market for raw materials and the higher income groups moved out of the industry back to agriculture, mainly planting mango orchards, but others diversified to silk-twisting at this time.

Following the initiation of industrial processes in the 1950s and 1960s, the sector experienced a period of growth in 1970s and the 1980s saw continued shifts from hand-reeling to the mechanised cottage-basin reeling production units faced the need to employ non-family labour. Increased demand and profitability made increasingly viable to hire outsider and measure of success and well-being for entrepreneurs was the ability to remove family from the difficult, ‘unclean,’ and potentially harmful work of silk-reeling.

This period saw a wave of labour migrations in to the growing reeling industry in the town. Significant populations migrated from other, smaller, silk reeling centres - particularly Kollegal and Chamrajpet - coming to the cluster already skilled in the work, for the higher wages being offered as well as for the possibility of getting advances. These workers are now established in the cluster – they have work experience and have built reputation regarding the quality of their work and reliability, they tend to have employer advances ranging from twenty five thousand to forty five thousand rupees which they have accumulated over time. Their financial position varies based on the number of family members employed, the education and earning capacity of the next generation, and levels of saving and indebtedness.

A scheduled caste Tamil population, which had migrated to the area before the establishment of the cluster and had been in the area for three to four generations, was also recruited to work in the sector. This population initially worked as agricultural labour and occasionally as labour in other local industry including timber production and silk weaving units, and moved to reeling labour as the cluster expanded in the 1970s and 1980s as Muslim entrepreneurs actively sought them out. The group now continues to largely be engaged in silk reeling both as entrepreneurs and as labour- after learning the work as labour in Muslim production units the second generation of silk reeling labour (third generation migrants to the region) set-up their own production units in the 1990s with the support of special government schemes and subsidies allocated for SC/ST entrepreneurs.

The 1990s saw other entrants in to the sector in the town as well as steady demand for the finished product, with state support contributing to both. In the early 1990s the Janata Dal Member of Parliament (MP) contesting from the region became Chief Minister of Karnataka State, and he later became Prime Minister of India in the mid-1990s. Thus this period saw high-level political interests in allocating funds to the town. Specific measures to develop and protect the silk industry were taken at this time including completely banning the import of raw silk from 1995 -1998, while regulated quota imports were earlier permitted (Santhanam and Purkhait 2013).

By early 2001 the state political environment had changed with the Indian National Congress coming to power and at the same time quota restrictions on silk imports were repealed as part of the market reforms which saw other sectors opening up in the 1990s. Tariffs on raw silk imports have fluctuated haphazardly since the abolishment of quotas, as a result of a tug of war between the interests and pressures from the sericulturalist -raw-silk producer lobbies and the weaving lobbies looking to import raw materials.

Photo Spread 2: Silk-Reeling

HAND CHARKA REELING

Boiling Cocoons

Spinning Raw Silk

Two units in operation

COTTAGE-BASIN REELING

Sorting Cocoons Boiling Cocoons Reeling

Working long hours with hands in water Stretching silk 'jute'

The silk and gold economies

The silk and gold economies in the town have been deeply linked for at least the last century - surpluses from silk production and savings from wages are invested in gold, often mandated by social norms, and gold is divested as a source of capital for the silk industry and also by both employees and employers to manage unusual expenses but also often for subsistence. The liberalisation of the Indian economy has impacted the silk production and the gold consumption economies in the town in significant ways. The opening up for the market to Chinese silk has impacted the viability of the local industry.

The opening up of the market for gold has resulted in easier entry to gold retailing, and the broader influx of foreign investment and export-oriented production units and credit, including micro-finance, has lead to a shift of labour away from the silk industry and also to a many-fold increase in middle-class incomes which has pushed up demand for and prices of gold. For many years there was only one jewelry shop in the town – established in the 1950s, owned by someone from the group of north Indian merchant castes that have migrated and established themselves as merchants across the country and are referred to as *Marwaris*[1] or *Saits*, who still runs the biggest business in the town – there are now over forty shops in the area - provision stores and hardware shops have been converted by their owners to jewelry retail units - and individuals with other caste and religious affiliations have entered the industry. These stores offer diverse saving schemes- some allow clients to buy small amounts whenever you have money, at the market price that day, and claim jewelry worth the sum of those amounts at the end of a year. For example one requires clients to deposit a fixed amount each month in order to be able to buy gold worth ten percent more than the total of their deposit after ten months – with an additional amount of gold which is a fixed percentage of the quantity accrued. Individuals can also pawn gold at many of these shops. Banks and large private financial corporations which operate across the country are also present in the town now and offer loans against gold – the most widely advertised being a three minute express gold loan offered by a Non-Banking Financial Corporation (NBFC) head-quartered in Kerala.

Photo Spread 3: 'Jewellers and Bankers' in Ramanagaram

[1] See Harriss-White (2013) on the Marwari merchant 'ethnicity'.

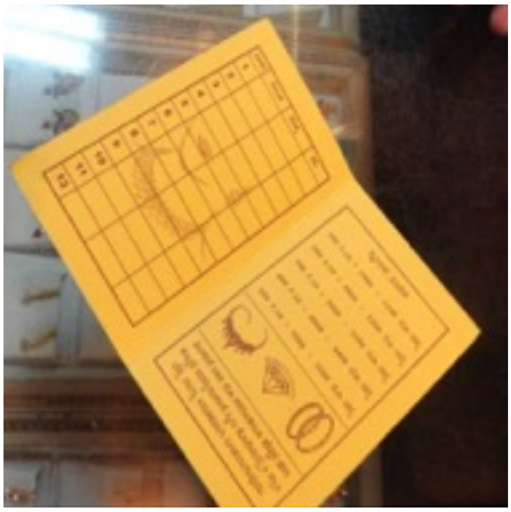

Three jewelry shops adjacent to each other, part of the cluster of thirty three jewelry shops on this street


A gold shop owned by a Muslim family


An established jewelry shop

Gold-based Savings Log

Advertisement by Non-Banking Financial Corporation (NBFC)


Ten month gold-lottery scheme

Liberalisation-era changes:

Gold as an indicator of an increase in asset inequalities across production units and the emergence of advances as an institution

Since early 2001 the silk- reeling industry has witnessed dramatic fluctuations in price and demand following attempts by the central government to open the domestic market up to imports of raw silk, which come primarily from China. Tariffs have been pegged upwards and downwards ranging from 50% to 5% of the cost of the import. Tariff cuts have typically been large and are often partially or totally revised in consequent years with the government juggling between pressure from weavers - who want to be able to import Chinese silk at low prices, particularly for use in power looms for which the stronger, machine made Chinese silk works better than Indian silk which is more prone to breakages – and silkworm rearers and silk-reelers who cannot compete with Chinese silk. Whether the Chinese silk is cheaper because of a strategy to dump silk in the Indian market and shut down local industry, or because it is machine produced using the type of automatic machine that just entered the cluster – or because of a combination of the two – is debated but remains unclear.

After 2001 large number of firms began to compete for good quality raw cocoons at auctions in the local market, pushing raw material prices up. Simultaneously demand for the finished product has wavered - sometimes very dramatically in response to changes in tariffs of imports in Chinese raw-silk- the shift from handloom to power loom weaving makes the cheaper Chinese silk especially desirable because it is more suited to the new technology.

The cuts in the import tariffs on the better quality silk result in crashes in the price of locally produced raw silk. For example, in 2011 tariffs were cut from 30% to 5% and prices of domestic raw silk plunged from Rs. 2,600 per kg to Rs. 1,800 per kg overnight (Central Silk Board, Bangalore). Two years later the tariff was raised to 15% and prices returned to earlier levels.

As a result profit margins have fluctuated widely and the volume of production varies constantly in an attempt to keep production at break-even levels. Increasingly production takes place at levels where the revenue from the sale of raw silk covers all raw material, labour and operating costs, and profits to the entrepreneur come from the sale of bi-products.

The labour force shrunk with the almost complete exit of child labour both as a result of enforcement by the labour department and perceived need for schooling - or at least to not expose children to the health damaging silk-reeling units, with young adult males traveling to nearby cities in search of work, and very much reduced in-migration as work in the sector is no longer as attractive. In the period following liberalisation financial difficulties have often resulted in more family members moving back to work in these units. Employer advances have been used to hold labour while maintaining this flexibility of output - keeping them in undesirable, low paid, and irregular work.

In 2011 a single new automatic unit was set up in the town with significant subsidy from the Central Silk Board both for its purchase and its monthly operation. The unit was imported from China and costs Rs. 2 crore – over forty times the costs of setting up a new cottage basin unit – but requires much less labour and has the capacity to produce a hundred times the maximum output of a cottage basin unit if it is worked two shifts per day. Silk produced using this technology is on par with Chinese silk and will cater to demand from power looms. This technology is currently completely unaffordable for all local reelers – the only reeler who has purchased it is economically and politically powerful, being the president of the local silk reelers association and involved in party politics, and he was supported by the local state. Other capitalists either dismiss this technology entirely – or express hope that cheaper, mid-range, semi-automatic units will at least become available - but it's existence still impacts the way in which they perceive the future of their industry.

External agencies had withdrawn funding by now. The World Bank, on grounds that the Mulberry crop had failed and that Multi-end Reeling units were not well-received by reelers because they required high investment and didn't improve efficiency much (Human Rights Watch 2003; Indian Silk 2011).

These changes mark a withdrawal of protection for the industry and a shift in support of political interests from the labour intensive filature reeling to the automatic reeling technology. This has brought about deep uncertainty for labour and capital in the sector which influences their long-term decision making - not only as a calculation of changes in financial viability of the industry in the short-run but also regarding how the future of the industry is perceived. This uncertainty has a cyclical impact on the industry with labour market entrants seeking employment in other sectors and the shrinking labour force leaving capital more and more convinced that there is no future for the industry. Their decision-making, planning, and aspiration for their businesses are framed by the sense that they will operate production units until they can find an alternative.

In the following section excerpts from narratives are used to explain the differential impact of the crash in the demand for locally produced raw-silk, post-liberalisation, on production units across the sector which explains the return of some owners of capital to working as labour in their or others' units and the increased need for, and ability of, those who can still afford to hire labour to offer higher advances of credit when they hire labour. Further, wages and credit advances in silk-reeling, twisting, and sorting are compared in order to illustrate how a history of low profit margins and the financially vulnerability of capital, a saturation of firms and competition in the market, uncertain demand following the liberalisation of markets for it's finished product, and the related movement of labour away from the silk-reeling sector have all lead to the development of a system of labour management that is much more reliant on debt than the other two sectors. The various ways in which employers and employees negotiate debt-based contracts and use them to negotiate interests and precariousness is discussed.

Diversity of the Impact of Liberalisation

In this section excerpts from narratives are used to explain the diversity of financial statuses and practices of producers and labour in the town and to understand how they have been impacted by the opening of the silk market.

A woman who now works a single hand charka with her husband describes the transition from times when her father-in-law ran a factory with a larger output –

"My father-in-law's business was doing well when I first got married. There were six functioning reeling basins and he employed fifteen people. We used to have 25 kgs *of sanna akki* (fine rice) at any time; we used to cook for all the workers everyday. The women of the house never entered silk work; we had enough to do in the kitchen! … Then when the prices fell we had big losses…

"First my husband pawned my necklace for Rs. 20,000. Of that he spent 10,000 on cocoons, 8,000 for the delivery of my first child, and 2,000 for household expenses. Still he made no profits, so he pawned my *thaali* for 30,000 – we spent 25,000 of that on cocoons. So then how much was left? Five thousand - it went towards paying back other loans we had taken. Then a chit fund matured so he used that money to pay back half the loan for the thaali – the necklace loan was too far gone, the interest was too high, we decided to leave it. Then a second chit fund matured, for thirty thousand we were supposed to use the money to pay the rest for the necklace but I got dengue and was hospitalised – it cost 20,000 because they did a scan of my head, so how much was left? Ten thousand, we still needed five thousand more for the necklace so I took a gold loan from the bank for ten thousand – five thousand we used for the necklace, another thousand for interest to someone else, two thousand for my sons birthday and another two thousand when we had guests visiting – how much was left?

"So in all as you can see we are making no profits from the business, only losses, and we are losing our gold in the process – not making new gold, not recovering gold we have, but owning less and less… I tell my husband he has no business sense, he keeps no accounts, I tell him to leave the finances to me and I'll make him money, but he won't listen!"

Another person, a middle-aged man, who has returned to working in his units said bitterly –

"Come and sit down if you like, and you can even have a cup of tea. But don't come here to ask me about my filature unit. I used to be a businessman, I employed ten people and fed them in my house everyday, but your people - the government - put me on the streets.

"After the prices fell in 2001, I was on the streets, I was forced to sell my six Rs. 16,000 cottage basins at Rs. 1,000 each and go to work in some one else's unit, I tried to make a business of selling onions on the street in Bangalore, I eventually ended up back here, bought another six basins at full price and am running my unit with family. If I had one less teenage daughter I would move back to Bangalore, but I have three and what would I do with them there? I can't send them out to work in public places, at least here they can work in the factory.

"I sold the earrings my wife's family gave her in 1996 when the prices were so low. I got 7,000 for them - and now they'd be worth more than one lakh. I went the other day to see if I could buy a tiny pair of earrings for my older daughter - nowhere as big as my wife's - and they asked for 42,000!"

Another woman describes how her wedding gold was used to run a small reeling unit in which she and her husband worked until the liberalisation, after which they've both started working in other people's units, but are now able to save –

"Soon after my marriage seventeen years ago my husband sold my thaali for capital for his hand charka unit. He made profits and bought it back for me, but then later when I had my daughter we had to keep her in the incubator for ten days, so we sold it again (we always sell gold, don't pawn it, because my husband says why pay interest? You might as well get the full value for it and then you can always buy again later). We haven't bought another thaali – things were difficult because we stopped running our unit twelve years ago and started working as reeling labour. But my husband has been saving in chit funds and with that he bought me the earrings I'm wearing now, he'll buy more for us as the days go. "

Gowramma has worked in silk-reeling since her family migrated to the town when she was a child. She worked at a few different factories with her parents and sisters till her marriage after which she started work at the present factory run by a family that her husband has worked for since he was twelve. She lives a small house that the factory owners have built for her in the compound where the factory and the owner's home are located. She doesn't have an advance from her employers, but they look after their needs, paying health care expenses, gifting them money at festivals, lending money without interested if needed.

She has been able to hold and liquidise savings in the form of gold -

“I didn't get any dowry or gold for my wedding. Who could afford gold in those days? Nobody gave dowries, all that is only now.” The first time I owned gold was when I bought these earrings twelve years ago. The earrings - are *gundus* (gold dome earstuds) - the ones I'm wearing now. I bought them with my savings because they say your ears shouldn't be empty. I wear them all the time now and I'd never pawn them.

“I've also bought another bigger pair of earrings - about ten years ago with money from an MFI loan. They are at the *Marwari*'s shop at the moment because I've borrowed money to lend to a relative in the village who needed capital for rice planting. I gave him the money because he always brings us rice from the village and I know he will pay of this debt with village rice as well. I've pawned these earrings so many times for things like this - because someone needs money here or there. “

Another woman describes how reproductive stresses and reproductive capital can cause movements of capital to labour and labour to capital –

“We used to have two *kai rattes* (hand charkas) and produced dupion silk till fifteen years ago but we sold them along with our home before our daughter got married. At that time we used to sell the silk we produced to people in the area, agents whom we knew well, and they'd take it to Bangalore.

“After that, since my husband still had his cocoon market licence he started a business of buying cocoons and supplying them to others. I went to work in another factory in the town.
A few years later my daughter's husband died and her in-laws brought her and left her on the street outside our house. She had two boys and was pregnant with a third. They put her on the streets, but could we, her parents, do the same? We decided to start a business to support her.

When our son got married we sold our daughter-in-laws jewellery and set-up this factory on land given by the mosque to my daughter because she was a widow. But now we've replaced her gold - double, more than double! We are doing well, thanks to Siva. Thanks to Siva we are doing well.”

The narrative shared by another couple shows how reproductive pressures and health expenses can push labour to be very vulnerable in debt-based contracts. They say –

“Our five daughters were going to school, we wanted to educate them and let them move forward in life. Our first two daughters finished school and are married – but then my husband got this illness. After illness came to him he could no longer work as he used to, he becomes breathless easily and can’t do the strenuous work of winding (which pays better). Because he is earning less we had to take our three younger daughters out of school and send them to work in factories.”

Her husband continued-

“The doctor said I have lung cancer, and has given me some tablets. He told me to stop smoking and to stop doing reeling work because both are making things worse. But how can I stop working, who’ll repay my advance and feed my family?”

A woman working as reeling labour tells a story that suggests that credit from employers can offer a degree of power in an otherwise exploitative marital relationship –

“My family didn't have to give my husband's family any dowry when I get married - and my husband's family didn't buy much for me either. Just two sets of clothes and my husband bought me a silver *thaali* and silver anklets. We moved to his village after we got married and I lived like a princess for three years. I didn't have to do any work, I had my first daughter there. But my husband was finding it hard to find work so we decided to move to Kanakapura. During the move I lost my *thaal*i, the chain came undone and fell off some where - with that my fate changed.

“In Kanakapura I needed to start going to work in a filature unit to support the family - so I brought my younger sister to look after my baby. My husband fell in love with my sister and took her as a wife. Since then it's been hard for me because he doesn't give me one rupee - I raise our four children on my own and I give him money from my earnings to help support the four children he's had with my sister.

“They've been living with me now for two months - but this is the first time since they got married that all eleven of us lived together. I don't like it at all - who would if it's *raagi* for one wife and rice for the other, caressing for one wife and abuses for the other? He doesn't even look at me if I'm sick but she just needs to wince and he's ready to take her to the shop (pharmacy) for medicines. I've asked them to move out and I've borrowed money from a finance company to pay the advance for their house.

“I haven't bought any gold or silver for my three girls - the advance I've taken from my employer went towards capital for my husbands business and my earnings have been just enough for all of us to eat. But when my silver anklets broke I exchanged them for anklets for my daughter. So at least she has that.”

The tone of the narrative raised questions about whether the lack of gold and the continued giving of money to husband, was a sign of deep vulnerability – or representative of exercising power in the situation – her lending to her husband giving her a certain control over him.

A twenty-two-year-old girl whose mother works in a *kai ratte* (hand operated reeling) factory said –

“People are asking for such high dowries these days. The only people my mother finds for me are old men looking for a second or third wife. Last week my uncle brought a reeling employee from a very poor family to see me – he said any way you are struggling now in your mother’s house, what difference does it make if you have to get married into a house where you will struggle? But the boy’s mother has a mental illness and runs about in the street and all the brothers and sisters are fighting with each other. I don’t want to get in to that.”

Her sister added –

“It’s not that people don’t want to marry her. At weddings and functions people are always asking who she is – but when they know we don’t have money they lose interest. For the last festival she wore a sari, artificial jewelry, and a headdress made of jasmines. Someone asked us – if the gold is real I will marry her to my son. Even when they knew it wasn’t they said if you can give her a gold chain like that we will consider her.”

The narratives from the silk-reeling sector that are presented here explain the way in which policy decisions, regarding import taxes on raw silk yarn, have interacted with social structures and reconfigured production, accumulation, and hierarchies in the local economy. Additionally, the narratives describe the role of the specific impact of gender norms on the vulnerability of work in the sub-sector.

The narratives suggest two broad ways in which tracing gold allows an understanding of the role of debt in labour contracts. Gold-based life-stories provide insight into how the reconfiguration of the local silk-reeling economy relates to the increase in the value of employer advances being offered by some employers in the industry and the impact of this increase on the viability of other firms. Additionally, patterns of acquisition and divestment of gold also provide an understanding of financial vulnerability of individuals engaged in silk-reeling by highlighting the factors that influence changes in asset holdings.

The increased *ability* of some producers to offer higher 'advances' can be linked to increases of asset holdings of individuals who were already more financially, socially, and politically powerful at the time of liberation and so were able to hold gold and the increased *need* to offer this credit can be linked to the withdrawal of labour from the silk-reeling workforce in search of alternate work. The employers issuing advances are among the owners of production units who have relatively higher financial, social, and political power – and usually this allowed them to hold gold through the period following liberalisation or acquire it after liberalisation, because they have access to an accumulated surplus, or simply because they have more sons than daughters. The end of the spectrum that has the ability to own their means of production, keep their families out of labouring, and offer advances to employees tends to correspond with the section of entrepreneurs who contend for positions in religious organisations and political parties. Their personal and financial histories have been connected with balancing the need to extract a surplus from labour, to maintain their socioeconomic status and to contest elections to campaign and to bribe voters and the need to maintain a respectable public profile, aided by the reputation of being a charitable person and a just employer. Paying low wages and using their role as gate-keepers to resources from religious governance bodies and the local state to grant access to welfare schemes which facilitated subsistence, and providing loans or access to loans when needed often to buy gold as dowry for a daughter's marriage or to avoid mortgaging gold or borrowing at high rates from other sources for healthcare expenses has been a technique used to keep their labour force indebted in multiple ways.

The increase in the advances has adversely impacted silk-reeling employers who lost assets after the crash in the market. Several firms, which employed between ten and twenty non-family workers before 2001, now run entirely with family labour. The high amounts of debt held by those employed in the industry makes it difficult for them to hire labour because they cannot afford the large sums that they would need to offer someone who needs to pay off debt at another unit before moving to work in their unit. The pressure caused by the increase in the rate of salary advances for the most vulnerable employers to operate with family labour, leading to increase in the working hours of women in households is one way in which feminisation of vulnerable work maybe occurring in the sector. The simultaneous movement of women, from families that continue to be accumulate a surplus - or those where higher inflows of dowry than outflows are newly able to accumulate a surplus - out of the workforce, suggests that it could even be possible to think about changes in the sector in terms of a 'vulnerable-isation' of labour, mediated by gender.

There is a great diversity in the patterns of acquisition and divestment of gold by both employers and employees in the silk reeling sub-sector. Some employees struggle to hold the gold that they have and cannot acquire new gold while others are able to hold their gold and to accumulate more gold. Some employees have large amounts of debt to employers and aren't able to make productive investment because the margin between the new advance they are given and the old advance they need to pay off is very small or because they are forced to use their advance for subsistence or to repay other debt. Other employees are able to make productive investments, including investing in gold, either with their advances or with other sources of income or credit. This could be because they are less financially vulnerable and so they might be able to move strategically between units in order to be able to make investments with their advances; might have other sources of income or less expensive sources of credit, or might have long term ties to an employer who lends them money when they need it, on flexible terms, rather than giving them an advance.

Gender norms appear to have played a particular role in reinforcing the range of ways in which asset holdings and the ability to accumulate a surplus on labour or capital has changed since the liberalisation of the markets for silk yarn. The pressure to give a dowry to a daughter has increased vulnerability of both men and women who lost gold at the time of liberalisation and struggle to recover it now at the much higher market price and this forces individuals to enter into and stay in debt-based labour contracts. On the other hand, the ability to hold gold could both contribute to the ability to arrange a marriage into a financially stable family and gold given as dowry can translate into capital which the family into which a girl marries can be used to establish a business.

The diversity of ways in which social, political, and economic factors have interacted to determine the extent to which an individual can accumulate a surplus on his or her labour or capital – with those who work in debt-based contracts sometimes being more able to accumulate a surplus than those who own production units – forces a reconsideration of how to define and locate the ‘capitalists’ in this economy. Tracing gold can offer one way of tracking asset holdings – to identify accumulation and dis-accumulation and to understand the complex of factors contributing to this. The strong connection between gold holdings and investment in raw materials allows a way of evaluating where individuals who appear to own their means of production may actually be self-exploiting their own labour because they earn less than minimum wage after deducting the interest they pay pawn-brokers on money borrowed to invest in raw materials from their profits.

In the next two sections, the spectrum between vulnerability and accumulation in the silkworm rearing and the silk weaving and retailing sectors are considered, before a discussion of the way in which the choice of institutions at which gold is mortgaged and the terms of interest on borrowings against gold relate to this spectrum.

The Silkworm Rearing Sub-sector

Up to half a century ago silk-reeling families in the district often raised silkworms as well, growing mulberry on their small landholdings close to the main city. However as the city expanded and as cocoon requirements and profitability increased with the entry of mechanised reeling, this activity was taken over by larger landholders in rural areas (Charsley 1998).

Some capital from this sector has now been invested in retailing within the central town and many former silkworm farmers have migrated to run businesses or to work in government or industrial jobs in nearby cities. On the bus to Ramnagaram town from Bangalore you are very likely to be seated next to someone who came from a silk-rearing home who is passing through the town on the way to his or her village for a visit. Often the owners of electrical goods units and hardware stores, cell phone shops, stationery stores, and photocopying booths, in the town, will talk about how they moved from silk-rearing to their present business. Taking a bus from the main town to villages where silkworms are still being raised you are guaranteed to meet several passengers who either are silkworm farmers currently, or have been in the past.

In the villages old style homes are quietly making way for more modern buildings. These homes often occupy the entire property and go up several floors, flat concrete roofs instead of the sloping tiles in older homes, closed entrances rather than the open spaces outside the home. They reflect both a desire to replicate what is fashionable in the city and the ability to afford to do so as a result of soaring land prices in the region which has increased the value of the assets of land owners significantly. Some families have moved out of worm-rearing and manage investments made with earnings from land sales instead, or property rentals instead, others have moved out because of severe water shortage, labour scarcity, financial shocks caused by worm infections or crashes in the market.

Mr. Ramesh Kumar, a forty-five year old man, from a family that has raised silk worms for over fifty years and owns dry and irrigated land on a main road connecting two important towns in the district, narrated –

"We've lost so much gold to pawn brokers over the years, we always went to one shop in Ramnagaram. We pawned many things, jewellery, even silver cups. Now I only keep (mortgage) gold at the bank. Just last month I kept 3,00,000 rupees worth of my wife's jewelry to dig a bore well. Luckily we got water this time - the first two times we didn't - and now we can start raising silk worms again next month."

Saraswathammma, who met us on her way back from a nearby tank where she had washed her clothes met as we were leaving Mr. Rameshkumar's house and invited us to her home, used to raise silk worms for a decade till 1992. First with her in-laws and then with her husband, after they were asked to leave the family. When they farmed on their own they used to lease land on terms referred to as 'paal' a form of share-cropping where the land owner provides raw materials, and agricultural labour, and the lessee works on the land and raises the worms in his home, and both parties get fifty percent of profits in the end. The couple stopped raising silk worms because the divided profits gave them very little income and they found it difficult to tide over bad crops as a result.

"My father sold one acre of irrigated land to get me married. That was in 1981 and he got 6,500 rupees for it. With 3,000 rupees he bought: my *thaali* which weighed five grams, *double-baath* earrings (gold in the shape of two ducks, which was a popular design at the time) which weighed six grams together, and a 300 rupee silk sari. The remaining 3,000 rupees he gave to my in-laws."

Saraswathamma said that they have been in debt since they left her in-laws home –

"At first we were unwise. We took a lot of loans. We even ate from borrowed money. We had 80, 000 rupees worth of loans in the 90s. We borrowed from people and from money-lenders. Everything we earned we lost paying interest. If we had the wisdom we have today we would have done things differently. My husband is a very good man. When we don't have food to eat he doesn't fight with me.

He says don't worry Sarasa, we'll have roti's tomorrow. But we have not managed to save any money at all, we haven't moved forward at all."

"We pawned my *double-baath* earrings at Badrilal's shop (the oldest pawn shop in the main town) for 6,000 rupees in 1995 but we couldn't recover them. I was *bari-kivvi* (empty eared) for ten to fifteen years. Then – because people say it isn't good if your ears are empty – I finally went to the same shop and bought these *billi-kallu* (white-stoned) earrings for the same 6,000 rupees in 1995. But they were only one gram each while my earlier earrings were three grams each."

" I still have my *thaali,* that's the only thing we haven't pawned. Once things were so bad I told Gowda (her husband) take it to the pawnshop, but he said pawnshops won't take a *thaali* because it's not good for them to do that. At least I still have that. I still remember by father bought it from Sudarsha Jewellers in Magadi. It's good gold and it's still shining like new."

Kavithamma, who is married to the younger of her maternal uncles, lives in a part of a large house where her father-in-law (also her maternal grandfather) used to run a *chawki* center (a silkworm breeding center which supplied just born worms to other farmers). Her older sister, married to the elder of their maternal uncles, lives in the other part of the home.

Kavithamma relates the circumstances of her marriage to her husband –

"My husband, my mother's younger brother was married and had two children, but he was alcoholic and fought with his wife all the time. There was something wrong with her also; she was always fighting. In the end she committed suicide leaving her one-year-old son and three year old daughter. After that my husband starting drinking even more. Somebody needed to look after the children but nobody agreed to marry him. In the end the said Kavitha is there anyway, why don't you give her to us and you don't need to give us anything (a dowry)."

"My husband does no work and he doesn't give me any money. I look after the silkworms, look after our cow, and work in the fields and we try to manage with what we grow ourselves."

"When I got married my sister's husband promised to look after my husband's children. So he put some money (together) and conducted our older daughter's marriage. Her husband's family didn't ask for much, they said give us the girl that's enough. Still it doesn't look nice to send a girl with nothing so he bought her gold earrings, a thin gold chain. They are good people and my son-in-law is doing well, he has his own tempo (a three wheel vehicle) and transports goods for people. They haven't lost her gold and in fact they have bought more for her and her baby (a one year old son). "

"We haven't come forward at all (progressed, made money). My husband never tells me about the loans he takes. I don't think he also knows. He borrows money and then can't repay it. He lost my gold like that and now he loses everything we earn. I will just make sure he doesn't sell our land (it would need her signature because it's ancestral property) so we can give something to our children."

Jayamma is an elderly woman working as agricultural labour in a silk-rearing village.

"I didn't bring anything when I left my husband's family, only the gold that my mother's house (natal home) gave me and nothing else. After my parents time by brothers didn't look after me. They put me on the street and none of them look after me – but I do coolie work (day-based labour) and I can eat and live. The only person who looks after me is my elder sister's daughter."

When asked about her wedding gold she said – "I was given the usual – *waale-jhumki* (earstuds with a hanging ornament attached) – and a gold chain. I haven't lost any of it. I've given it to my elder sister's daughter to keep with me."

When asked about any pieces of jewelry she keeps with her, she says, "I have nothing except this (a thin gold chain fastened around her neck with a safety pin). My elder sister's daughter gave it to me because she said when we go out together to weddings and functions it doesn't look nice if all of them are wearing jewelry and my necks is bare."

Weaving and Retailing

The center of the '*Pete*' Bangalore, the old city that existed before the colonial Cantonment, housed a renowned weaving cluster for over two centuries. Several participants in this research talked about how small tiled roof homes filled the area and how almost every home had a few handlooms in it. Twisting units, dying units, sari design artists, and punch card makers were located in and around this area, they said.

Now silk weaving pockets of Bangalore city are characterised by the clatter of power looms. Whether it is an old handloom centre in the heart of the city or a newer hub, on the outskirts, the rhythmic clanking of the metal shafts that lift and lower silk threads on the warp and the clicking of the fly shuttle and that fills the weft reverberate through the narrow lanes separating production units. Only the discerning ear can identify the few handloom units that continue to function by picking out the softer sound of the older wooden machinery.

Weaving units typically consist of between four and six and or power looms, each operated by a male weaver. A woman is usually engaged to do the subsidiary work for the whole unit, loading yarn on to twisting machines and then transferring them on to spools using a hand operated spindle. People working in weaving constantly draw attention to the lack of new entrants into the labour force, "when we were young weaving you'd always see children in the weaving workshops, trying to learn the work, now look, all you see are grandmothers and grandfathers, there will soon be no looms left."

Mr. Mariswamy, a seventy-five year-old weaver migrated from Salem, Tamil Nadu to Bangalore in 1960, following his older brother to work in a handloom unit run by a man from their town. His wife and one-year-old son came with him and the family lived in a room on the property, which housed the weaving workshop and the owner's home. He recalls that, while about twenty people were hired to weave in the ten-loom unit, accommodation was only provided to him and his brother because of their connection as 'people of the same place'. He described a close friendship with the owner's family that developed over the two decades during which he worked there, explaining that he still visits them often and that he only stopped working there because the family closed their weaving unit because they had made money, there children were educated, and they didn't have to do it anymore. 'Nobody stayed in this business,' he explained, 'those who did well used their earnings to educate their children, and to do something else.'

Mr. Mariswamy said he tried to run his own business after working at another weaving unit in Bangalore for about a decade, he invested in two looms but he struggled to make a profit because he had to run around a lot to procure raw materials and to sell his saris. 'It doesn't work unless you have a guaranteed buyer,' he said, 'otherwise you have to take one or two saris to ten wholesale dealers and hope they buy it. It takes a lot of time and doesn't work out in the end.' He closed his unit down after two years and worked in a government weaving-centre, but left because he felt corrupt officials were ruining the centre. He now works in one of the few weaving workshops left in the city.

'Now nobody values weaving work,' he says, 'It's strange, everyone wants more and more saris these days, but the few weavers who remain are becoming poorer and poorer. None of our people (of their caste, who were traditionally weavers) will give their daughters to a weaver because they know that means a life of poverty. Girls and boys have studied well and everyone wants to marry someone who has studied engineering or (sic) MBA.'

Mr. Mariswamy says his wife bought five or six pairs of earrings over the years –

"She would keep her earrings in the (pawn broker's) shop for something or the other and then leave it there. Then after sometime she would save up and buy another one. Now she has only the pair in her ears."

Nagamma, a middle-aged woman, works in a power-loom unit. She works on the stage of production traditionally done by women – preparing the silk yarn so that it can be loaded on to the looms. This still is the most common women's work in the sector - few women are trained as handloom weavers and almost no women operate power-looms. Nagamma learnt this work as a child in Andhra Pradesh where her father and his five brothers ran a weaving workshop with family labour. She married her maternal uncle who is also a weaver. He worked in Bangalore for a few years but he is alcoholic and unwell and so Nagamma supports him now.

"My parents didn't have to give me a dowry when I got married since I was marrying my mother's brother. We had a simple wedding. I wore the earrings that my family had bought me a few years before that – they had made earrings for all the young girls in the house – my father's five brothers lived together so there were many of us who grew up like sisters. I took those earrings with me and nothing else."

"I pawned those earrings many times and finally let them go. Now I have these small earrings and this chain and nothing else."

"We did one thing though. We conducted my daughter's marriage very well. We spent four lakhs (four hundred thousand rupees) and she got married in to a good family. We had to do the wedding properly, it's not like the old days when a few relatives gather in front of the girl's house and tie the *thaali* have lunch. Now we have to hire a *choultry* (marriage hall) and call many people. Gold was less expensive then and people asked for very little. Now the prices have gone up so much and people are demanding at least ten – twelve sovereigns (eight grams each) before the talks even begin."

Kammalamma, a seventy-year-old woman who has remained unmarried, lives with her three brothers and their families who run their father's weaving and retailing business. They live in the center of Bangalore's busiest market area, in a three-storey home, built above their ancestral home, which now is their store and showroom.

"We used to have looms right here," said Kammalamma, referring to the storeroom where we met with her, "Men from the family used to work, but workers from outside would come also. Now we don't have any looms here but we have workshops in many different places along the outskirts of the city. My brothers and their sons look after the workshops, dropping raw materials there and collecting finished saris."

"I was never interested in jewelry, since I didn't get married, what did I need it for? I have what my father made for me when I was young and my brothers look after me well. I don't ask my brothers for anything like that – but I had just one wish. That was to create a replica of the stone statue in the temple outside our house – in pure silver. Ten years ago we finally did it, and now we keep the statue in our *pooja* room and take it out once a year and keep it in the temple for the festival. Everyone comes to pour milk and ghee on the statue because they believe it's good luck – and it's good luck for us also. The only thing I've got done was for God."

The large amount of silver locked into this sacred object is indicator of the difference between this family and those who struggle to buy a few grams of jewelry that they are more likely to liquidise.

Photo Spread 4: Images from the Silk and Gold Trading Center in Chickpete Bangalore

Seven-foot Silver Statue in the Home of a Silk-retailing Family

Photo credit: Sabine Hornig

The cash counter at one of the largest silk and gold stores in the area

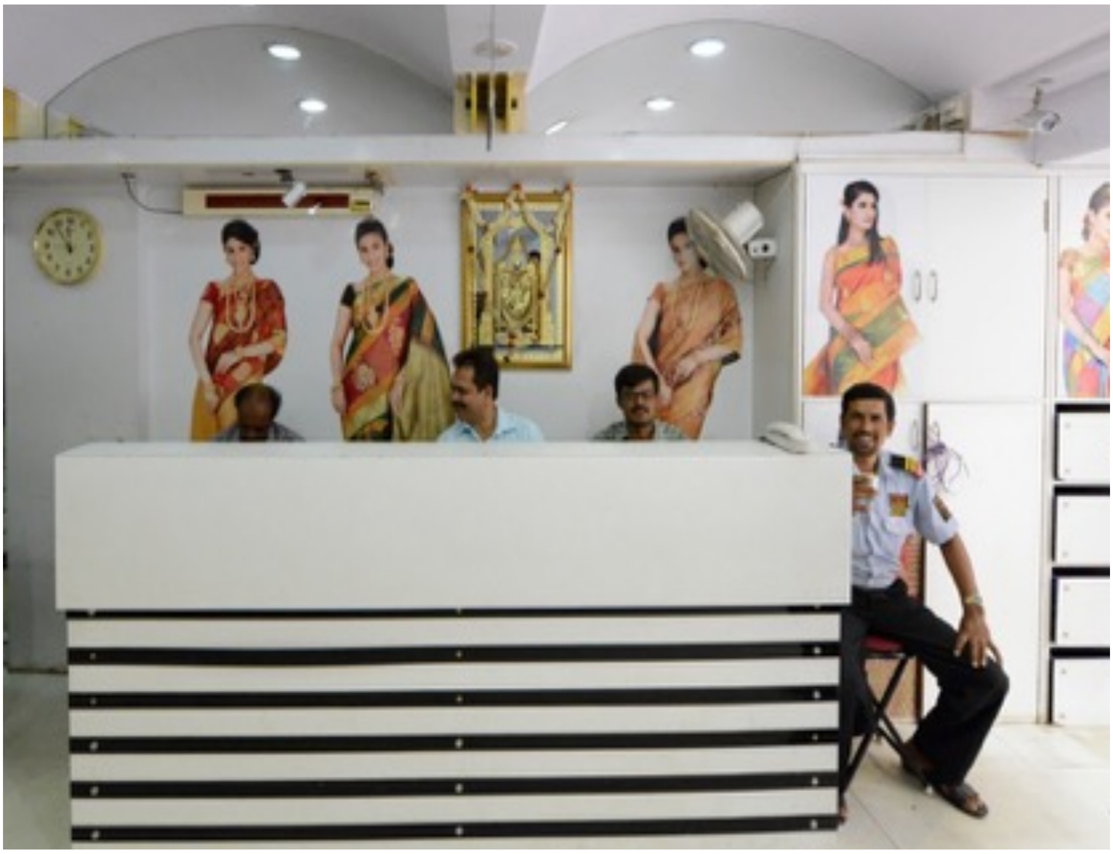


Photo Credit: Sabine Hornig

An older jeweler-pawn broker shop

Photo Credit: Sabine Hornig

Spectrums in the Silkworm Rearing and Weaving Sub-sectors

In the silkworm rearing and silk weaving sub-sectors, again, gold holdings appear to relate to the history of accumulation of an individual, determined by the interaction between policy and social structures in the local economy. The cases point to the wide variation in the gold holdings of stakeholders which both correlate with their financial positions and asset holdings over time, and appear to have been reinforced with liberalisation related changes. This variation is related to the wide difference in the terms at which individuals across the sectors sell their own labour – and points to individuals whose work has become less valuable and whose working conditions have become more difficult.

Additionally, in these sectors again we see specific relationships between gender norms and changes in gold holdings, with particular cases highlighting the roles of norms associated with widowhood, of status or respectability associated with keeping women out of the workforce, in addition to dowry related pressures.

Individuals in these sectors who sell their labour at the lowest price in these sectors are better able to hold gold and to meet their basic needs than those who receive the lowest wages in the silk-reeling sub-sector. This relates to the higher market minimum wage in these sectors, but also, relatedly, to the relatively higher socio-economic conditions of the caste group to which they belong, which contributes to employers, family members, caste associations and other social institutions being able to offer different forms of support and more easily accessible and flexible credit to the lower income earners.

Despite the lower deprivations in access to basic needs, because of the higher incomes and asset holdings of the caste groups to which they belong, individuals in these sectors are faced with the pressure of needing higher gold holdings in order to secure a marriage for their daughters, to maintain family status and prestige, and to be able to access credit to meet higher spending requirements.

The relatively better socio-economic status of these groups meant that women were typically kept out of work that was not household-based. The relative fall in the incomes of the most vulnerable male earners over the last decade has led to two kinds of trends. Some families may choose to allow women to enter the workforce – to seek subsidiary work in power loom workshops, and also to be employed in domestic work, textile factories and other industries. Work outside the weaving sector often women to earn salaries compatible with those that male family members earn in weaving. However, like in the silk-reeling sub-sector, women who work outside the home continue to be responsible for reproductive work in their homes and so their work hours increase significantly. On the other hand, families that continue to keep women out of the workforce are faced with the pressure of managing on incomes that give them little more than access to basic needs.

Gold-based Credit and Savings

A variety of gold-based savings schemes are accessed by stakeholders in the silk industry. Individuals from the *Marwadi* caste that originally migrated from Rajasthan in North India have established a wide-network of jewelry and pawn-brokering shops across South India. Going to the *Saitu angadi* (*Sait*'s shop) is almost synonymous with going to pawn gold. Newer entrants into the business from other caste groups are now found across the study region and these jewelry shops also have established regular clientele. National financial corporations have also entered the market and at least three institutions who call themselves 'gold-financing companies' have numerous branches across the study region. Nationalised and private banks also offer gold-based loans.

Mortgages are often made in the shop where jewelry was originally bought because of the terms offered, but different circumstances, requirements –including that of anonymity – and calculations of cost might take borrowers to one of the other institutions. Some individuals have preference for one particular institution while others juggle between different institutions. The sum of money that is borrowed against gold, the expected duration before the principal can be repaid and the reason for the borrowing all appear to influence the choice of institution in addition to interest rate, to the scale of financing offered, and to familiarity and trust.

Mortgages maybe classified according to the value of the gold or type of ornament pawned – and individuals may refer to the practices they use for "small jewels," typically adult or child finger rings and small earrings, or "big jewels," usually gold chains, bangles, and big earrings. The word used for mortgage often suggests the term for which the loan against jewelry is taken – to "put" gold in a mortgaging institution refers to a short term loan, typically a small amount, for immediate use; to "keep" gold refers to a longer loan, usually for a productive investment; to "leave" gold refers to a long term loan either for a big investment or, more commonly, because financial circumstances make it impossible to reclaim the gold; finally, to "let it go," worded very slightly differently than to "leave," refers to forfeiting the gold rather than paying accumulated interest. These different types of mortgages imply different degrees of vulnerability.

For example, a woman explaining that she has come out of a period of difficulty and is now much more financially secure, said – "Earlier I used to pawn my gold all the time. Now for the last one year or so I haven't pawned my gold at all."

When asked about the exact nature of her last mortgage, she said that she had "put" gold rings gifted to her children in the *Sait* shop the previous week. When asked about the difference between this and pawning gold earlier, she said –

"But this is not the same at all. Earlier I used mortgage all my gold and then I'd have to wait a long time till a chit fund matured to get it back. Now we take small amounts and we can pay it back with our salaries at the end of the month and get the gold back."

In this, like in others, the value of gold pawned in relation to total gold holdings, and whether gold mortgaged is part of the minimum that a woman is required to wear to maintain her status, are also indicators of vulnerability. The minimum requirement varies with season as well, with gold being liquidised to meet expenditures in some seasons when there are less public gatherings, and gold being reclaimed to be able to maintain status at other times. An employee at a Non-banking Financial Corporation explained –

"After festivals we have a lot of people coming to us to pawn gold because they've had a lot of expenses. Then in the wedding season no one comes to pawn gold, only to take it back, because women need to wear it to the functions."

Gold Mortgage Institutions and Terms

Type of Institution	Type of loan	Loan Term	Monthly interest rate	Annual interest rate	Scale of Financing	Time for loan dispersal	Bank account needed	Flexibility	External jewelry appraiser fee
Nationalised Banks	Agricultural	12 months	0.96%	11.50%	75%	Sixty minutes	Yes	Strict adherence to terms but renewal possible	Yes
	Non Agricultural	12 months or 24 months	1.08%	13.00%			Yes		
Private Banks	Standard gold loan	3 months to 24 months	1.16% to 1.25%	14.00 %to 15.00%	60% to 70%	30 to sixty minutes	Yes	Strict adherence to terms but renewal possible	Yes
	Agricultural loan		1.08% to 1.16%	13.00 % to 14.00%					
	Women's loan		1.08% to 1.16%	13.00% to 14.00%					
Non-Banking Financial Corporations	Various sub-brands based on company	1 month	1.00%	12.00%	Up to 95%	Ten minutes	No	No flexibility	No
		3 months	1.25%	15.00%					
		6 months	1.67%	20.00%					
		Above 12 months	2.00%	24.00%					
Pawn-brokers		1 month to 11 months	02.00% to 03.50%	24.00% to 42.00%	60%		No	Two to three month delays negotiable	No

Despite the significantly lower interest rates offered by banks, many individuals in the silk-reeling sector chose to pawn their gold with a jeweller-moneylender.

A silk reeling employee explained this preference -

"I always buy gold from Badrilal – (the first *Marwari* jeweller in the town). He sells good quality gold and he buys it back at a good rate. If you leave your gold with him – he's flexible, if you are a few months overdue with payments he won't auction your gold away straight off. He sends a notice first and gives you extra time."

"The silk-reelers know him well because they go to him so regularly – and when they do he jokes with them. "What's this? You're pawning it again?" It's all in play. He knows that he has made good money because of the silk-reelers and he is respectful to them. I'm telling you all this because I know – when my husband was running his unit – he went there all the time.

Another woman in the silk-reeling town described the same jeweller -

"He is a good man. If you phone him and say that you have come to his shop because you need money but the shop his closed, he will send someone to open it and give you the money. If he is not in the town, if he is in Bangalore or Kanakapura, he will just call up the bank manager and ask him to give you money and he will give it to them later. He has such good *parichey* (is well known, respected) with everyone."

A woman working in a weaving workshop in Bangalore explained her preference of the *Sait* u pawn shop –

"I've never given my jewelry at the bank but I have gone to Mannapuram. Their *badi* (interest) is lower than at the *Sait u* shop – one and a half rupees (per hundred rupees per month) compared to two and a half or three. But if you don't make a payment, they make you pay double the next month (instead of collecting an extra month's payment at the end). They send you a late notice and they charge you for it! Sixty or seventy rupees go like that each time. If you can't pay for a few months, they take your gold, you can't go and talk to them and get permission for a few more months like you can at the *Sait u* shop."

"We've been going to the same *Saitu* shop since my mother's time so I prefer to go there. We know him well and he knows us. He gives us money for fifty *paise* or one rupee (0.5 – 1 percent) lower interest."

A couple working their own single hand charka reeling unit said –

"They said they take less at the bank so we went there, but we are not sure, we feel we've been paying and paying and the principle amount remains the same. The interest is lower but I think we may be paying more in the end."

On the other hand the farmer engaged in silkworm rearing, quoted earlier, said –

"I've paid enough interest to the *Sait* shop over the years. I've had enough. Now I only leave jewelry in the bank."

He explained that he avails of gold loans from the bank regularly and that he had pledged INR 3,00,000 recently, to access credit to pay for the installation of a bore well on his property, in order to be able to continue to cultivate mulberry for sericulture despite the water scarcity in his village.

The manager at a nationalised bank said –

"Most people chose the *Sait* shop over the bank because they don't understand how our loan works. At thirteen percent per year our loans are much cheaper. But because people are used to thinking about interest in monthly terms and are used to comparing loan with interest of two and three rupees (per hundred per month) when they hear thirteen percent they think it's too much. They don't realise it's per annum so it's less than half the cost of the Sait shop loans. Slightly educated people come to us and the poorest people end up paying so much interest."

The practices of a woman from a weaving family suggests that in addition to different schemes being chosen for different types of mortgages – based on the value of jewelry and the loan amount sought – the accessing of different schemes may be gendered. Speaking about a popular 'Gold loan company' she said –

"I've never gone to Muthoot, we only *keep* our 'big jewelry' there and my husband always goes for that. I've heard that they give up to the full value of the jewelry, but the conditions are very strict for that. They only give a five or six month loan and if you don't repay it in that time they'll take the gold so we've never done that."

Lack of familiarity with these schemes keep others from availing of them. A woman from the silk-reeling town explained –

"I've heard they give good loans in places like Muthoot but we don't know anybody there and you have to go so far to their office (all located on the highway just outside the town). I've never gone to enquire there. I just to go to the jewelry shop on MG road, any way it's not as if I have so much gold."

However these Gold loan companies often lend to entrepreneurs engaged in silk-reeling, who use these loans for working capital in a manner similar to which other entrepreneurs described accessing credit at jeweller-pawn broker shops.

An employee at a Non-Banking Financial Corporation said –

"Silk-reeling factory owners come to us because we give them money quickly. They will go to the cocoon auction in the morning and see if they can get a good price for cocoons. If a purchase is fixed they'll quickly come here, give the gold, take the money, and they'll be ready to pay for the cocoons and pick them up at the right time. They can't go sit in the bank waiting for a loan to be sanctioned – and they don't need that kind of loan either. Turnover time is short: they buy the cocoons, reel the silk, and they get returns within thirty days, at most. They come back, take the gold and don't come back till they need money again."

"Silk merchants generally don't want to declare their borrowings. They come here, take the loan and go without any money going in to their bank account. Since they usually want less than one lakh, we can give them cash directly."

Gold Acquisition

Gold-based Savings Schemes

Savings in the form of gold might be made through dedicated gold savings plans or through other savings or credit schemes like enrolment in rotating savings and credit groups (ROSCAs) or Self-Help groups. Gold may also be acquired using employer advances and micro-finance loans.

Jewelry shops offer different types of savings schemes. In addition to the interest offered on savings, the terms on which loans will be given against the jewelry in the future or jewelry bought in the shop will be bought back influence the choice of gold-based savings schemes. Schemes may also be selected based on the quality of gold jewelry, the patterns offered and the opportunity to custom design jewelry redeemed against savings, associated lottery schemes, or free 'gifts' offered by the jewelry shops.

Cheeti schemes where individuals who enrol make monthly payments, and claim gold at the end of the term, are one from of savings. Festival related *'cheetis'* are common and in these schemes customers pay monthly instalments on which they earn interest. At the end of the scheme term, often coinciding with a festival, the individual is given gold worth the sum of the principle paid by them and the interest accumulated, some shops may allow the redemption of the entire amount in cash, sweets or fire-crackers may be given in addition to the cash or gold depending on the festival and the scheme terms. *Cheetis* that are not related to festivals may also exist, often offering gifts of stainless steel vessels and other items are particular intervals. Other schemes are associated with lotteries, where each month a winner is picked who can claim a lump sum of gold and then exits the scheme. For example, in a twenty four month scheme enrolling two hundred and fifty people, where the monthly contribution is INR 500, an individual who's name is drawn in the first five months gets gold worth INR 5000 and then immediately exists the scheme. This translates to 900% returns for the first person, who has only paid INR 500, 500% returns for the second who has paid INR 1000, 333% for the third and so on. Every five months the sum of prize money increases, but at a diminishing rate, ensuring higher returns than payouts but resulting in lower returns to later prize winners. The draws happen on a fixed date each month and any customer who happens to be at the shop at the time is invited to draw the winning chit. The twenty-fifth and final draw is held at the end of the scheme, by which time one-tenth of those enrolled have won prizes. The lure of the lottery makes these schemes popular despite the slightly lower interest rates offered.

Shops with computerised billing systems offer a newer scheme where an individual can buy a fraction of a gram of gold, at the rate on the date at which they deposit, worth any sum over the monthly minimum and then they can avail of the total accumulated weight of gold, plus an additional fixed percentage weight on accumulated gold, at the market price at the end of the term. The variable amount of investment is popular amongst those who both want to force themselves to save a minimum amount but also hope to be able to invest larger amounts in gold. This scheme is beneficial to customers when the price of gold escalates over the saving period, but could lead to losses if the prices fall to such an extent resulting in them paying more for each gram of gold than the market value on the day on which they redeem their savings, despite the additional percentage weight of gold added to their savings as interest.

The ability to access gold-based saving schemes is related to vulnerability. At the end of the spectrum that invests their labour and capital under the most precarious terms – enrolling in a saving scheme is almost impossible. Low wages, unpredictable employment and unpredictable markets means that even if committing to the minimum required by such schemes seems feasible, unexpected expenditures will almost certainly cause a default on payments. Gold purchases by this income group, usually mandated by requirements for life cycle events, are made with expensive credit.

<u>Gold and Rotating Credit Groups</u>

Rotating credit groups, also called *cheetis*, are privately run lotteries not related to jewelry shops. These schemes seem to be closely linked to jewelry purchases but they could either be associated with high rates of savings or with expensive credit, depending on when the individual bids for money. In these associations each individual makes a monthly payment and each month one individual can bid for the amount. Bidding is in terms of fraction of the amount that they will forfeit to the group as interest. For example, if thirty members pay INR 1000 each, any one in the group can bid for the total, INR 30000, in the first month. Members of the group evaluate the severity of each others credit requirements and bid strategically based on this. If it is known that one person in the group needs money urgently others might bid to bring the sum that he or she claims to the minimum possible. Though some cheeti groups have a fixed minimum sum, others allow members to bid as low as they are willing to go and the first winning bid can be as low as 30 to 40 percent of the total amount. The individual who claims the loan in the first month continues to make the monthly payments through the term of the *cheeti*. So, the interest they pay for the whole term (usually determined by the number of people enrolled) could be 60 to 70%. This interest accrues for those who wait till the end of the *cheeti* to claim their sum.

Individuals may enroll in the scheme to be able to quickly access credit with a long repayment term. For example a woman in a silk-weaving cluster explained –

"We had to put two lakhs (INR 200, 000) towards my daughter's wedding, one lakh for gold, thirty thousand as dowry to her husband's family and seventy thousand for the wedding, you know for chicken, mutton, and *Biriyani* for the guests. We enrolled in two *cheeti* schemes, one for sixty thousand (where thirty members pay INR 2000 per month for thirty months) and one for seventy two thousand with thirty-six members (paying INR 20000 per month for thirty six months). We called (bid for) both *cheetis* in the first month and got twenty thousand from the first *cheeti* and thirty thousand from the next *cheeti*. We took the money and held the wedding and I've been paying four thousand for this every month for the last two and a half years. We pawned one chain and one pair of earrings for my daughter's delivery but we haven't been able to get it back yet because after the monthly *cheeti* money and house-expenses I don't have anything left."

By the end of both *cheeti* terms this woman would have paid INR 132,00 against the INR 50,000 she borrowed. This amounts to 200.00% interest over the thirty-month term for the first loan and 125.00% interest on the second loan over thirty-six months. The annual rate on the first loan is 80.00% and on the second is 41.33% - the monthly rate is 6.67% on the first and 3.44% on the second.

The difference between the bid amount and the total sum available for the month is shared between all the members of the group – either immediately, or later, or through concessions on their monthly payment. The value of the principle and the interest paid by each member varies. Members who can wait borrow the money towards the end of the term and collect a high interest on their investment in the credit group. The lump sum from a *Cheeti* bid is often used to release pawned gold and individuals looking to do this strategically calculate when they should make a bid in order to maximise the sum of money they can collect and minimise the interest they pay against the gold loan.

Micro-finance and gold purchases

The relationship between micro-loans and gold acquisition could also represent strategic investment or increased risk of over-indebtedness, depending on the vulnerability of the borrower, the purpose for which the gold is bought and who holds the gold purchased. Where micro-loans are used to purchase gold and surplus earnings are regularly deposited against the gold purchase over time it could represent a relatively low interest way of acquiring credit for an essential gold purchase. Many people describe the use of micro-finance in this way – particularly to buy gold for a daughter's dowry that they would not have otherwise been able to afford – as a way in which they have benefited from micro-lending. Even when the gold is not required urgently, but is considered more of a long-term investment, buying gold with microcredit, rather than through saving schemes is still attractive. The advantages cited include the fact that gold can be used immediately, both as an ornament and a source of credit. It can be worn to social functions and pawned for emergency cash requirements, including to make a monthly micro-finance payment when needed. However, purchases of gold using micro-loans could exacerbate over-indebtedness amongst those who are already more financially vulnerable, those who don't have a stable source of income or earn a regular surplus – and particularly when the gold is transferred to another owner, such as the marital family of a daughter. In these cases expensive small loans maybe taken frequently to make micro-finance payments – which individuals describe as a situation of paying '*maraadha badi*' or a second interest. Paying interest in order to repay micro-loans pushes up the actual value of the rate of interest at which the gold is purchased.

Gold holdings, employer advances and debt-based labour

As discussed already, the relationship between gold holdings, employer advances and debt-based labour is also complex. The larger employer advances, currently being offered, can allow some employees to move strategically between firms and to accumulate a surplus, often in the form of gold. On the other hand the existence of these large advances can make employers vulnerable – because significant proportions of their capital is locked into these advances or because they struggle to run production only with domestic labour because they cannot afford to pay advances. This vulnerability of employers is reflected in their ability to hold and purchase gold. Employees who have accumulated large advances over time and have moved frequently, to access marginal credit amounts, often are unable to borrow money from their employers on good terms for an occasion like a daughter's marriage. On the other hand employees who have stayed with a single employer – in an older form of labour contract that was not based on a debt-relationship – are better able to access credit on good terms for essential gold purchases and are also better able to save towards gold or buy gold using other sources of credit.

The terms of interest on savings or credit that is used towards purchasing gold or releasing mortgaged gold tends to reproduce the financial vulnerability, or the ability to accumulate, of an individual. Those with a low surplus income and low asset holdings are generally less able to save towards gold on a regular basis and to acquire gold through credit schemes, including loans from micro-finance institutions, and employer 'advances'.

Photo Spread 5: Gold-related Advertisements in Bangalore City

Advert for gold loans on the door of an ATM

Advert for a gold-based investment scheme

Advertisements for modern and traditional jewelry


START
BUYING GOLD
FROM ₹50 PER DAY
MY GOLD PLAN
GOLD. EVERYDAY.
www.reliancemgp.com
RELIANCE
WORLD GOLD COUNCIL


QUICK GOLD LOAN
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ಸಾಲವನ್ನು ಕೊಡಲಾಗುತ್ತದೆ
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Conclusions and Possible Further Research

The Regulation of Accumulation by Social and Political Institutions

The practice of gathering the life stories of individuals in relation to gold offers a way of tracing socially embedded capital over time and allows an understanding of how social and political institutions relate, to regulate capital accumulation in the informal economy in India.

Tracing the relationships between the acquisition, ownership, and divestment of gold allows the hearing of financial histories that link the productive and reproductive spheres. They point to broad trends created by policy decisions – which impact all individuals in the same sector to some degree – and also point to ways in which social norms and affiliations both determine policy and regulate it's impact. Changes in asset holdings following the opening of the markets to silk imports, which happened along with other changes related to broader market liberalisation and increased foreign investment in the region, point to an increase in inequalities in the silk reeling sub-sector. Silkworm rearing was also impacted by this change – but not to as great a degree as reeling because of the higher value and flexibility of capital – allowing shifts to cultivation of alternate crops or movement out of agriculture. The weaving sector is seen to gain from the import of raw silk at rates lower than domestic prices also because the machine spun silk that is imported is stronger and more suitable for use on power-looms. However, here again the impact of this change is differentiated – those with higher capital holdings are able to accumulate at a greater rate while those without capital face diminishing incomes and falling asset holdings. The exponential increase in the value of gold, and of land, has reinforced the widening of inequality between those who have been able to hold assets and those who have not, as has the differentiated access to jobs and to investment opportunities outside the silk industry.

Movements of labour and capital out of the silk-reeling industry seems to relate to those who have been able to accumulate and to hold a surplus on returns to their investment in the industry; those who have remained in, or re-entered the industry, tend to be those who have not been able to accumulate productive or reproductive capital and largely work in the industry because of a lack of alternative. Entrants into the industry as employees usually need the credit offered as an 'advance' enough to lock their labour into a debt based contract rather than entering better paying work where they cannot access credit. Often these individuals are single-mothers who did the work before they were married but now re-enter the workforce because they have the skills required and tend not to be able to take the risks involved to access other credit sources even where they are available to them but they might also be men who need the credit for family health expenses, a daughter's marriage or even subsistence but will not be able to find employment outside the sector. There is also a re-entry of women from families where women were earlier only involved in reproductive work, and of men who otherwise were only involved in managerial tasks, because the family can no longer afford to pay the large 'advances' required to employ labour, On the other hand, in families who have been able to accumulate capital, or in those where gold from dowries for their sons, for example, women are able to leave the work force or to do less work. These trends suggest that not only is there a feminisation of the labour force post-liberalisation as other researchers have found (for example see Garikipati and Pfaffenzeller 2012) but we might also argue that there is a vulnerable-isation of the labour force, mediated by gender and other social institutions.

The silk-rearing and silk-weaving sub-sectors also seem to be seeing similar trends. In the silk-rearing sub-sector, the large increases in land prices have widened the inequality between landowners and the landless. Education, social connections and the ability to be mobile for work influence the ability seek employment outside rearing villages, therefore individuals from families who are educated or have relatives who migrated to the city decades earlier tend to find employment easily while those without social connections, mothers with young children and the elderly continue to work as agricultural labour. In the silk-weaving sector again increasing land prices have impacted the difference in the value of asset of landowners and those who have not invested in land. There are almost no new entrants to handloom weaving and even power-loom weaving is seeing less young male entrants seeking to learn the skills required to man the looms. Individuals who have been able to educate their children have moved out of the industry while those who have not do piece rate work that leaves them with less of a surplus on income as a result of increasing prices.

The narratives gathered suggest that patterns of accumulation are extremely nuanced and vary in particular ways both within and between sub-sectors. The returns to investment of labour and capital in this industry can be seen to occupy a spectrum – from those who experience dis-accumulation or diminishing assets and those who are able to accumulate a surplus. This spectrum appears to relate both precarity of work and a more broadly defined vulnerability including other aspects of life, with each reinforcing the other. Additionally the terms under which gold is bought, mortgaged, or sold suggest that patterns of access to credit further reiterate inequalities with the most vulnerable individuals accessing the most expensive credit. The existence of these broad relationships is not surprising. However what is interesting is the possibility of using accounts of gold holdings to locate the pattern of accumulation of an individual engaged in the sector relative to that of another, and also to understand the complex of factors that interact to determine patterns of accumulation. Accounts describing the materiality of gold - that is the relationship between individuals and objects made from gold - allow insight in to the way in which social structures regulate the accumulation of gold. Gradual or sudden increases or decreases across sub-sectors often point to the impact of policy decisions regarding the sector on accumulation. The difference in the degree to which policy decisions impact individual gold holdings, and the persistence of trends triggered by these decisions, reflect the history of their ability to accumulate a surplus and also social, political and economic power.

The diversity of ways in which social, political, and economic factors have interacted to determine the extent to which an individual can accumulate a surplus on his or her labour or capital – with those who work in debt-based contracts sometimes being more able to accumulate a surplus than those who own production units – forces a reconsideration of how to define and locate the 'capitalists' in the silk reeling economy. The idea of breaking down the clearly polarised categories of labour and capital towards conceptualising a continuous spectrum ranging from those willing to labour in contracts reproducing precarity to those who are able to accumulate a surplus from capital – based on gold ownership – could allow a way to build on the work of scholars who've emphasised the blurring of the two categories (Breman 2013) and the possibility that those who appear to be entrepreneurs do not always own their means of production (Harriss-White 2014). Tracing gold can offer one way of tracking asset holdings – to identify accumulation and dis-accumulation and to understand the complex of factors contributing to this. The strong connection between gold holdings and investment in raw materials allows a way of evaluating where individuals who appear to own their means of production may actually be self-exploiting their own labour because they earn less than minimum wage after deducting the interest they pay pawn-brokers on money borrowed to invest in raw materials from their profits.

Extensive empirical work emphasises the need to acknowledge the crucial relationship of social structures to accumulation and importance of understanding their historicity to understand the informal economy in India, and the value of the attempt to combine material culture and oral history approaches to understand the relationship between individuals and sites of accumulation over time needs more detailed exploration. Extending this way of accessing precise data regarding the rate of returns to labour and capital, by tracing the interest rates at which savings towards gold take place, at which gold is mortgaged or sold to other individuals along the spectrum from low earning labour to those who are able to accumulate significant capital could allow a more detailed understanding of accumulation patterns in the sector. Mapping both changes in gold holdings across an individuals life time and the terms at which gold is acquired or divested could allow an understanding of the impact of their history of accumulation on the way in which their asset holdings change in response to current trends and also to understand the sustainability of accumulation in the sector over time.

The multiple ways in which gold is valued and used means that relating the rates at which financial transactions around gold are made to the narratives explaining the factors that determine these financial decisions, could offer a deeper understanding of the ways in which social institutions, interact towards determining accumulation – and also of the relationship between accumulation and vulnerability.

In addition, the practice of listening to gold-based life stories could offer a way of studying and understanding other communities and regions and work in other sectors across India since gold has a role in almost all family stocks of wealth, and is linked to informal and formal production as a result, with particular variations across social affiliation and geographic location.

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