



SDF1/2014

Social Development Forum

Innovation in India's Informal Economy

Barbara Harriss-White

CONVENER'S NOTE

This paper examines the ubiquitous formal-informal duality of Indian economy through a case study of Arni, a Moffusil town of Northern Tamil Nadu. Arni is populated by about one lakh people; the majority of them are low castes. Informal sector dominates the economy of the town, but formal-informal linkages are strong and visible everywhere. The socio-economic life of the town is inextricably interwoven with the formal-informal duality which apparently lies at ease, unnoticed by the inhabitants and actors of the formal and the informal economy.

Against the conventional wisdom, the informal economy of Arni is a crucible of innovations which are of various types. They are adoptive and adaptive, incremental and ruptural, for profit making and other uses, problem solving and solution oriented, filling the gap, and so on. Sometimes, they are meant for the promotion of collective interests and sometimes only for an individual like running the business of the family. These innovations are, however, not confined only to the domain of the informal economy, but are also part of the formal economy.

In such an economy, the formal-informal duality is transposed to the level of institutions that results in 'hybridity' of institutions. The 'hybridity of institutions' is although functional, yet not without contradictions.

Finally, the study emphasizes that the informal economy of India is not stagnant or resistant to changes. It is driving India's high growth rate. Innovations of the informal economy are an important driver of this high growth rate.

These are the issues that have been addressed in this short paper which is based on a talk given by the author on March 13, 2014, at Council for Social development, New Delhi. I express my sincere thanks to Prof. Barbara Harriss-White for this talk and the paper.

New Delhi
September, 2014

Ashok Pankaj
Convener, Social Development Forum
Council for Social Development

INNOVATION IN INDIA'S INFORMAL ECONOMY

-Barbara Harriss-White*

The research reported here was provoked at one remove from an Indo-British scientific¹ project grounded in field-work that I have been co-ordinating. *Were India to embark on a low carbon transition, would the informal economy in which nine-tenths of all jobs and two-thirds of GDP are located be a barrier to the innovation that would be needed?* Despite an institutional architecture for renewable energy and energy efficiency, since a low carbon transition is precisely the opposite direction to India's current development trajectory (and since India is no exception in this respect), there is no direct way of discovering the answer.

So the question was reframed: *does india's informal economy innovate?*

While cities are accepted as strategic sites for global integration and key drivers of economic growth and innovation, most of India's population lives in villages and small towns dominated by the informal economy –firms and markets that are not regulated by the state but instead by local business associations and forms of authority mediated through institutions of identity. The literature on 'mofussil towns' and 'subaltern urbanisation' records huge and persistent deficits in infrastructural provision and evokes stagnation, relative underdevelopment and lack of innovation.

In addressing the question of innovation in the informal economy, some points about concepts, discourse and epistemology need clarifying at the outset. The terms 'innovation' and the 'informal economy' are typical of contemporary social science in generating a repertoire of 'fuzzy concepts' – ones with multiple meanings and many associated thematic subfields. Innovation denotes novelty, but novelty can be relative and is always socially grounded. For every act of invention, there is novelty attached to local economic and social adaptations and adoption. The concept of an innovation system – all the institutions in place to develop, protect, finance, disseminate and commercialise (adapt and adopt)

*Barbara Harriss-White is Senior Research Fellow, Area Studies, and Emeritus Professor of Development Studies, Oxford University. She is also Co-ordinator, South Asia Research Cluster, Wolfson College, Oxford.

¹ Please visit: <http://www.southasia.ox.ac.uk/resources-greenhouse-gases-technology-and-jobs-indias-informaleconomy- case-rice>

innovations² - presupposes the process of invention can be routinized once institutions are in place inside a corporation or a state. That assumption has been widely questioned. India has a distinctive set of terms for innovation: Indovation, Frugal Innovation, Jugaad, Bottom of the Pyramid innovation and marketing. However their literatures confirm that although low cost, incremental, corner-cutting bricolage may be incentivised outside research labs, the context is always the corporation and its adaptation to India's low income mass market. This conceptual family is far from Anil Gupta's 'Honey Bee' data bank of rural innovation, where rural development is seen as embodying constant adaptive innovations emerging from an indigenous capacity to innovate, far removed from labs. Neither kind of approach examines the informal economy. A further distinctively Indian concept is of enterprise, this time focussed on the individual. The noun 'enterprise' is widely used to denote an individual firm - regardless of its capacity to innovate. Generalised to an 'enterprise culture', innovation inside and outside work loses its original Schumpeterian meaning and instead glosses³ conformity as a subject to the totalising neo-liberal era. Clearly this use of 'enterprise' does not actually mean entrepreneurship. Meanwhile political anthropologists of knowledge have shown how new practices rest on a base of skilled but routine knowledge and physical competence, that much innovation is incremental rather than disruptive and that it is not only the researcher, nor even the manager but also the labour force that is capable of innovation.

The question of informal innovation can thus be unpacked to include

- i) the type and scope of innovation (invention, adaptation and adoption /disruptive versus incremental/ sites, products, processes, organisation, technological repertoires);
- ii) the question of the state's role in informal innovation and institutional hybrid vigour;
- iii) the extent to which institutions exist in the informal economy that parallel those of the 'innovation system'.

For our field research in the informal economy, and assuming that place-specific history can produce insights about more general processes, we took for a research

² A multitude of potential actors, such as producer organizations, research organizations, extension and advisory services, universities and educational bodies, governments and civil society organizations, co-coordinating bodies, individual farmers and farm labourers, and the private sector (including traders, processors, supermarkets etc.)

³ For an overeducated segment of the labour force even mundane work for a wage in a supermarket is relabelled as 'enterprise'. See Gooptu, 2009. Neoliberal Subjectivity, Enterprise Culture and New Workplaces: Organised Retail and Shopping Malls in India, Economic and Political Weekly, vol xliv, No. 22, pp. 45-54.

site a single (one lakh) town, Arni, in northern Tamil Nadu, that has been studied through revisits since 1972. Its economic base consists of administrative activity, rice marketing, general retail and transport, plus small industrial clusters of rice processing, silk weaving, gold ornaments and (recently) an education hub of private colleges. Over two thirds of livelihoods take the form of self-employment in this town. The local economy is regulated through business associations grounded in identity (town, occupation, caste and gender). Half of the total 67 presidents of business associations and trade unions were interviewed in 2012, together with some focus groups – 74 respondents in all. Presidents were assumed to have been elected to represent their sectors, being knowledgeable, experienced and able to present a thirdperson account of the sector rather than an individualised business history. This proved correct.

The summary of what we found takes the form of an analytical narrative using case material and there is space only for conclusions here. ⁴

1. INNOVATION

The town is seething with innovative activity. High aggregate growth is transformed into innovativeness and institutional churning on the ground.

Inventions: Examples of inventions were provided by electricians – over 700 of them, mostly rural-urban migrants or commuters, of whom only 20 had any formal educational qualification. Inventions rested on a substrate of ‘learning by doing’ - electricians are informally formalising their skills through certification from their trade association based on years of work experience. The trigger for innovation has been state-failure: in this case wild voltage fluctuations and power cuts which raise the maintenance costs of electrical equipment most notably irrigation pump-sets. Customers were used as ‘research labs’, risk and physical danger being insured in an ad hoc way by the trade association. The development and dissemination of innovations adapting three-phase equipment for two-phase power supply were not hampered by lack of property rights. Indeed they were incentivised through a collective culture of collegiality.

Adaptive innovation was found to be common, exemplified here by a ‘computer centre’ which combined novel forms of collective ownership and part-time

⁴ For the detailed working paper see Harriss-White B. with G. Rodrigo, 2013, ‘Pudumai – innovation and institutional churning in India’s informal economy: a report from the field’, <http://www.southasia.ox.ac.uk/working-papers-resources-greenhouse-gases-technology-and-jobsindias-informal-economy-case-rice>

management; instalment payment systems; process innovation (3-D software); capacity building for product innovation (computer-aided design); capacity building in the English language for poorly educated rural clients and informal-formal certification of competence. This is a novel adaptive organisational response to lack of adequate capital or adequate demand in which formal educational skills are being diffused to the informal Tamil language economy in return for an informal formalisation through certification.

Adoptive innovation was by far the commonest form however. Recalling the wave of innovation adoption characterising the green revolution, this is far from being a new process. But the dizzy pace and wide scope of adoption of products, processes/technologies and forms of organisation are without precedent. In the explosion of new products and processes, new knowledge and media, new packaging, branding and competition to defend market shares and forge loyalty, innovation adoption frequently requires the destruction of products and exchange relations for which there are new substitutes. (Examples range from local alcohol to backstreet banking, shell crushing for paint, hand-washing of clothes, hand making of stainless steel and aluminium vessels, etc). Practically, all require increases in energy and material content.

Innovations in the formal sector, particularly for finance and exchange are preconditions for informal adoptive innovation; for example grain sales in the Regulated Market (after decades of failure) trigger new village level bulking and transport and new sites of quality checking using newly assembled labour forces; ATMs and NEFT challenge informal credit, enable new scales of trade and transport and frequently substitute fixed prices for haggling.

The *innovations of capital* have ambivalent impacts on labour: informal certification empowers workers and enables them to exit from local relations of control. Local labour markets are becoming increasingly segmented as workers acquire new skills and specialisation. Within a given sector (say construction) contradictory processes emerge, for instance outsourcing versus vertical integration. And low caste female workers are simultaneously being displaced in one sector (rice milling) and allowed to enter in others (fruit retailing/tailoring). A comprehensive labour shortage incentivises mechanisation, feminisation and the in-migration of labourers from less developed states of India. Migrants have then to be taught elementary language skills as well as the competences of 'unskilled' work.

The transformations to apprenticeships necessary for most *self-employment* also have ambivalent outcomes – on the one hand increased velocities of skilling, informal certification, gender-specific training versus – on the other - increased drop-outs, exit and intensified undercutting with a lowering of standards.

Local market spatiality is being transformed on the one hand with de-spatialised electronic transactions - on the other, with the entry of women to artisan services such as tailoring leading to markets segmented by gender and sited in domestic as well as

public space.

The town's wage labour force is also exerting *new kinds of agency* – with simultaneous but class-specific migration in (for informal wage work in the bazaar) and out (for formal wage work requiring certified education), with the out-migration of children for education - spatial mobility potentiating social mobility.

Labour itself is also capable of innovation, notably at the design stage under the putting-out system for handloom silk weaving.

Supplementary interviews with the town's sanitary labour, transport workers, loading and unloading and portering workforces revealed a fault line between the seething innovative activity among self-employed workers and owners of small family firms on the one hand and low caste wage labour on the other in which there was a marked absence of change in technologies and work conditions.

Incremental and Ruptural Innovation in the Family Business and Business Family 'We don't want to work for others.' 'Self-employment is an aspirational state.'

The small family business, the building block of the Indian economy, has expanded rapidly in the last two decades of 'domestic liberalisation'. Economic Census data suggests that in the 95% of India's firms with fewer than 5 employees, while the number of firms more than doubled, the average labour force has declined from 2.9 in 1990 to 2.4 in 2005. The economy is expanding through the multiplication of tiny/small firms which rarely accumulate - and Arni town is no exception. Not only are all sectors expanding in numerical terms but new skills generate increasingly specialised firms – the former general purpose 'hardware' shop (which sold everything from screws and rope to irrigation equipment) has spawned specialised machine tools, white goods, ironmongery, electrical goods etc.

Alongside such incremental change, a new phase of ruptural change is very likely to be about to begin. When sons (whose economic socialisation had been kept within a tight circle of kin) have at last started to be educated from a young age to unprecedentedly high standards in English Medium Schools, they prove less willing than ever to submit to patriarchal authority. When sons (and daughters and nephews) exit from the town, either the family firms collapse or they are replaced by wage-labour and sensitive tasks such as negotiating credit / haggling over prices which cannot be subcontracted to wage-workers are replaced 'innovatively' by fixed prices and cash or NEFT payments.

The next stage of ruptural innovation is likely to see the family firm replaced by formal branches, franchises and agencies aligned to new scales of subnational capital.

2. INSTITUTIONAL HYBRIDITY

Hybrid informality :While the concept of the informal economy is of lasting value in drawing attention to the limits to existing regulative law, it must not be considered as a blanket category. These days, a firm will typically be registered with the local authority – and perhaps even with the Commercial Tax authority – but it will flout the labour laws, still transact on verbal contracts, pay local taxes with utmost reluctance and ignore environmental law and rules regulating construction. At the same time formal and informal institutions are increasingly closely interdependent – exemplified in the hybridity of education.

A Hybrid 'Institutional Ecosystem': Education and Innovation

'Education is using land to take the place of land'. 'The knowledge economy is an extractive industry.'

Education doesn't directly increase productivity so much as work indirectly through managing access to finance, infrastructure and the state. What about innovation? As the powers of family, caste and gender are slowly and unevenly dissolving as barriers to entry, education is emerging both as a labour market requirement and as an indispensable precondition to running a small firm. Recent years have witnessed a vast increase in private, 'English medium' education: the town boasts 25 pre-school nurseries, about 100 private schools (some with swimming pools and websites) and seven private colleges. All have their own bus services. Private education is now part of the town's economic base. 'Private businessmen's playthings', they are formally registered, regulated and state-inspected. But this process is flawed and vulnerable to informal practices such as low and individualised pay, capitation fees (bribes for entry), unregulated teaching standards, even the corruption of examinations. They are manned by teachers and patronised by students outside the immediate locality -their multipliers are not local.

The underfunded state system acts as a skill safety net when it receives drop-outs from the private system. At the same time much innovation is happening in state education. From smaller class sizes through new curricula and the prohibition of physical punishment to the introduction of Activity Based Learning, teaching practice is so receptive to innovation that state education most resembles a model innovation system. We encountered informal invention in formal education. For children forced to drop out for weeks at a time due to parental sickness and/or the peaked compulsions of work, state-school PTAs have innovatively organised evening classes to help such children to catch up. An NGO is also working with local state schools to expand this initiative.⁵ Yet innovative change is sometimes constrained by the very same state system: party

⁵ See the earlier suggestion Roman and Harriss-White, 2003. On the Insecure lives of Tamil Nadu's Silk Weaving Families see *Frontline*, vol 20, No. 24.

politics has swung between a freeze on teacher recruitment and a failure to allocate recruited teachers to positions, resulting in dysfunctional class sizes, wrecking the capacity of the public system to respond to the legal requirement of 100% enrolment and forcing surplus teachers into the private and informal sectors.

Demand for education has generated an explosion of informal tuition centres, which, set alongside apprenticeships, informal training centres, learning by doing, and the trade-assisted dissemination of media messages, complexifies the hybrid institutional ecosystem. By 2012 there were well over 100 tuition centres, mostly manned by fresh graduates (often women) or retired teachers, with classes ranging from 15 to 20 at the low end, to 200 at the high extreme. Regular state teachers are not allowed to moonlight (though a few seasonally break the rules). Competition in the parallel informal education system of 'tuitioning' - is fierce, with more or less misleading advertisements of success crowding the advertising hoardings in the town centre.

But an 'education paradox' is at work for the positions requiring high education in banks, corporation-branches and state agencies were seen to require conformity not innovation. In this small town, education is for exit not for innovation.

Informal Innovation in the State

The state is normally assumed to be inefficient and un-entrepreneurial. As with the case of education, so more generally, however, our discussions with the business association presidents, an Electricity Board director, the representative of Arni's lawyers, and the leader of the transport workers disclosed the existence of a constant stream of adoptive innovation.

An 'informality paradox' is at work: the state can regulate innovation outside its political reach in the informal economy. Generally such effects fall into the category of unintended consequences and they operate at a range of scales. Macro-level reforms to trade policy (reducing direct protection) has led to the scoping of new raw material sources requiring adoptive innovation in mechanisation (for example in silk yarn). At the state-level, indirect support to informal transactions is given by the provision of infrastructure (lowering its transaction costs and facilitating for instance new scales of networked specialisation in gold ornaments, parboiled rice etc). At the same time municipal development can tolerate informal activity (providing sites in municipal marketplaces). Or it can forcibly destroy the informal economy as when urban beautification and new roads put roadside sites out of bounds – generating new hybrid practices (such as the overnight storing of verge-side stock and small stalls in formally registered, glass fronted, secure shops). Finally it may sustain the IE both through social safety net / rudimentary social protection outside work and through supplying a practical alternative wage floor nearby (as with MGNREGA which further reduces the impact of risk factors).

So the state regulates the IE indirectly, selectively but without coherence

3. AN INFORMAL INNOVATION SYSTEM?

What roles do social institutions play in innovative activity?

Over and above the threats to, and transformations of, the *family firm* (working as self employed, with or without other family members and wage workers), the hybrid public-private/ formal-informal *education system*, and the indirect interventions of the *state*, which have been summarised above, four other kinds of institutions stand out for the frequency with which they were mentioned. Two are formally registered but affect informal innovation: banks and business associations (the latter is hardly surprising since we interviewed their presidents). The third is the gold sector. Fourth, it was clear that informal institutions of identity (such as caste and gender) matter to agency and innovation.

Banks and finance

The effects of the influx of formally registered national banks can hardly be overestimated. First they encourage innovation in new scales of technology, with subsidised loans encouraging capital bias, which in turn demands physical logistics for high capacity utilisation. Banks also allow working capital loans for pure commerce (forbidden until the late 1990s). There is also no monitoring of virement or onwards lending into the informal money markets. 'As long as we re-pay the instalments the bank doesn't interfere at all.'

By virtue of their collateral requirements (title deeds, etc) banks may play a role in formalising the informal economy along the lines advocated so influentially by de Soto (2000).⁶ Loans for education and housing have rapidly increased in size and frequency. Formal property may secure (multiple) loans from (multiple) formal accounts that are subsequently invested in the informal economy or lent onwards to others. These are impossible for banks to monitor (bank manager). Title may be vested in a collective (the family) under the customary laws embedded in the constitution, and hard to associate exclusively with an individual. And 'there have been problems with duplicate (forged) title deeds'. Certain banks do not require collateral to lend to some occupation groups (e.g. tailors and sanitary workers). Yet the 'new' banks are far from routing the big informal financiers in Arni who remain businessmen (traders and agents), landlords and 'finance corporations' (in which a group of savers, including government employees, invest).

⁶ Soto, H. de, 2000, *The Mystery of Capital*, Basic Books Perseus Books Group, New York.

Business associations.

Beyond the state's reach informal economic activity is regulated either as though the law were being enforced, or through authority based on identity, or through decisions of business associations. These organisations span the entire spectrum from the formal and nationally federated to the local and non-registered.⁷ Caste remains a crucial element in a corporatist system of economic regulation in which caste ideology is secularised and increasingly internally differentiated, while the institutions of caste move from the domain of culture to that of the economy and are loosely mapped onto business associations. These define economic behaviour, coopting members across class and thwarting the development of class consciousness. Their regulative roles may include screening entry, apprenticeship, defining contractual measures and types, credit, price control in the 'market' especially for labour and derived markets such as portering and transport, working conditions, the guarantee of livelihoods, mobilisation to compensate for accidents and premature death, poverty and social distress. The state also shapes business association activity: the need to limit the state's intrusiveness (e.g. from the Labour Act; the Packaging of Commodities Act and VAT), to protect members from the police, to appeal against discrimination, while campaigning (often using bribes) for preferment and for infrastructure, for social rights and contracts. How have the business associations themselves innovated?

Many associations exist reactively, spurred by threats. But federation is one innovation that has gathered strength over the last 15 years in Arni. A second is business association support for informal training and the provision of accreditation for skills, a human 'collateral' permitting the development of de-personalised transactions and migration for work. A third is the circulation of trade information, essential for the adoption of innovations from elsewhere. A fourth is the cosmopolitanisation of membership, such that the alignment between caste and trade associations is increasingly weak and acquired skills replace ascribed merit.

Risk Protection and the Gold Economy

Innovation requires risk-taking. For electricians and construction workers this risk may be physical, but for the most part it is financial. We have no direct evidence about the equivalent in the informal economy of venture capital but, since no-one mentioned it, conclude that lack of it is not a constraint on incremental innovation. Risk permeates the informal economy. 'Half the town is saving against shocks' (Chamber of Commerce). Sickness, marriage alliances (despite the downward drift and increasing optionality of dowries), and private school and college education are as 'shocking' to the small firm budget as are weather related downturns or business losses. For shock-absorption purposes, bank interest is not high enough to compete with returns from

⁷ Basile, E. (2013) *Capitalist Development in India's Informal Economy*, London & New York:

property and gold, which can be cashed or mortgaged easily. In response to the demand for gold, a big jewellery-company from Chennai is setting up. And yet, the biggest savers (and lenders) are widely said to be government officials with the least shock-prone work conditions and contracts.

Identity

The informal economy is still deeply embedded in institutions of identity and their interaction affects agency and innovation.⁸

Gender: While women are well represented among classes of workers enduring chronically oppressive conditions, and have entered the labour market as home-workers, no woman was mentioned as an entrepreneur. Educated girls and women aspire to salaried jobs, an educated groom and reduced dowries.

Caste: Modestly educated dalits work in fruit and veg, sanitation and recycling, portering, rooftop work, blacksmithing, lorry driving and lately informal finance. Though one dalit is the administrator of Arni's municipal bureaucracy and another is a high-ranking teacher, the well-known role models for dalits are three illegal moneylenders with large houses, compounds and swimming pools (an innovation in Arni) whose financial careers emerged from portering and fruit and vegetable selling. While most economically active people hanker for exit, Dalit aspirations are different from those mentioned by the 'purer' castes: the police, the army, chauffeuring.

Religious Minorities: For Muslims and Christians, innovative reservations, each about 3.5%, have been carved out in state employment but access may be dominated by the Christians. Muslim children are educated in Urdu until 6 standard, after which they go to government Tamil schools where they are reported 'not always to perform well'. Muslim girls are also starting to obtain education but 'do not transform it into work afterwards' (said a teacher).

Despite the town's being a 'low-caste place', it is clear that being a dalit, belonging to a religious minority and being a woman confine work possibilities for roughly two thirds of its population to positions where it is much harder to innovate in the informal market place.

Formal and informal institutions, state, market and pervasive social institutions are intertwined and dynamically unstable. But the institutional nutrient base for innovation spans the bounds of formal and informal regulation in idiosyncratic ways and seems to operate with few inter-linkages – even informal ones. The combination of the family firm, education, the (informalised) state, banks and gold, business associations and institutions of identity does not form a coherent structure of innovation.

⁸ While women are 50% of the population, Dalits are around 15% and Muslims and Christians about 10%.

CONCLUSIONS

We will summarise this summary of the relation between high growth rates and local innovation in the informal economy in terms of questions and answers.

1. Is the informal economy an obstacle to innovation? Not in this town: it is an innovation crucible (but it is moving in the opposite direction to a low carbon transition).

2. What kinds of innovation happen in the informal economy? All kinds but mostly adoptive (both incremental and ruptural), for profit but also for other motives: livelihood and the standard of living, the problem-solving mentality celebrated by Jugaad, the need to respond to selective state failures in provision, regulation and enforcement, risk minimisation, pre-emptive reactions to threatened change, collegiality/collective advancement and nurture), by labour as well as capital, relying continuity of knowledge plus new forms of knowledge, involving exit, exodus and destruction.

3. How important is hybridity? Institutions of the state, market and 'civil' society are intertwined. Laws may be selectively ignored, captured, or transformed beyond recognition in implementation. Interests in the state create illegal markets and then benefit privately through rent from them. The meshing of formal and informal institutions counters the idea that they are discrete epistemological universes but this does not mean that the formal-informal distinction should be abandoned or that this hybrid 'ecosystem' works in a co-ordinated or systematic way or that it is immune from contradictions. Institutions serving useful roles in the structure of accumulation (gender for instance) may be barriers to agency and innovation.

4. Is there an institutional cradle like the innovation system? The key institutions mentioned in the narratives of Business Association Presidents were: the family firm (self-employment), education, manifestations of the state, banks and gold, business associations and institutions of identity. But a coherent informal structure of innovation has yet to emerge and may never do so.

Many development processes are interacting with innovative concatenations. English medium education interacts with local jobless growth to incentivise exit from the family firm at a time when new scales of subnational and national capital are waiting to displace bazaar arrangements with franchises, agencies and branches. Branding and packaging, innovations in electronic banking combine to replace price haggling with fixed prices. Together with the replacement of family labour by wage work discretionary retail credit is also compromised.

While received wisdom stresses the stagnation of moffusil towns, this new research shows the informal economy is not resistant to change but is the dynamic manifestation of India's comparatively high growth rates and the site of all kinds of relatively low cost innovation.



Barbara Harriss-White

Barbara Harriss-White is Senior Research Fellow, Area Studies, and Emeritus Professor of Development Studies, Oxford University. She is also Co-ordinator, South Asia Research Cluster, Wolfson College, Oxford. Her research interests have developed from the economics of agricultural markets to India's socially regulated capitalist economy and corporate capital; and from the malnutrition caused by markets to many other aspects of deprivation: notably poverty, gender bias and gender relations, health and disability, destitution and caste discrimination. She has a long term interest in agrarian change in S. India and has also tracked the economy of a market town there since 1972. She has held research posts in the Centre for South Asian Studies, Cambridge, the Overseas Development Institute, London and the London School of Hygiene and Tropical Medicine, before coming to QEH in 1987 to teach rural development and peasant economy.



Council For Social Development

Sangha Rachna, 53, Lodhi Estate, New Delhi -110003. INDIA
tel.: 91-11-24615383, 24692655, 24611700, 24618660
Fax No. 24616061
Email : csdnd@del2.vsnl.net.in, Website : www.csdindia.org