Making the Poor Pay for Public Goods via Microfinance
Economic and Political Pitfalls in the Case of Water and Sanitation

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Abstract

This paper critically assesses microfinance’s expansion into the provision of public goods. It focuses on the problem of public goods and collective action and refers to the specific example of water and sanitation. The microfinancing of water and sanitation is a private business model which requires households to recognise, internalise and capitalise the benefits from improved water and sanitation. This requirement is not assured. Water and sanitation, being closely linked to underlying common-pool resources, are public goods which depend on collective governance solutions. They also have shifting public/private characteristics and are merit goods which depend on networks to enable provision to take place. Two cases, from Vietnam and India, are presented and evaluated. Despite their dissimilar settings and institutional designs, evidence is found that both projects encountered similar and comparable problems at the collective level which individual microfinance loans could not address. The paper concludes that trying to make the poor pay for public goods runs into four pitfalls: politics, public capacity, values and equity.

Zusammenfassung

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1 Introduction: Radicalised microfinance

Microfinance is increasingly promoted by foundations and international organisations as a means for increasing access to public goods such as education, healthcare and water. Rather than promoting small business, which microfinance has normally done, a growing range of programmes is also trying to use small loans to enhance or replace the state’s activity in public goods. Advocates of microfinance have recognised the past failure of many developing countries’ governments and municipal bodies at ensuring adequate and equitable access to key public goods and suggest these failures could be overcome by sufficient and correctly tailored small loans. As an influential report prepared for the Gates Foundation proposed,

[m]icrofinance in many instances could help increase the level of service for individual households and for communities within a shorter time span than would have happened if these groups had to rely solely on public resources or their own savings. (Mehta 2008: 47)

The idea here is that public goods will be paid for by the poor via microfinance, instead of by transfer payments organised by the public sector. This is a logical extension – or better defined, a radicalisation – of the original concept of microfinance as espoused by its father figure, Muhammad Yunus.¹

Yunus’ political vision, which has guided his sustained efforts to promote microfinance, is that “government, as we now know it, should pull out of most things except for law enforcement, the justice system, national defense, and foreign policy, and let the private sector, a ‘Grameenised private sector’, a social-consciousness-driven private sector, take over its other functions” (Yunus 2003: 204). The assumptions differ between writers as to how microfinance business models could take over the public sector’s role in providing

¹ Muhammad Yunus is microfinance’s best-known spokesperson, but by no means “founded” or “invented” modern microfinance. For instance, the “Comilla” model of rural development loans in Pakistan, based on German co-operative societies, predated Yunus’ entry onto the scene by more than twenty years (Khan 1979).
public goods. These business models sometimes bundle microfinance institution\(^2\) lending with broader social service activities, and at other times they simply assume that the social good is a by-product of microlending. But more often they suggest that loans can be used as a means for people to “buy in” to services they otherwise could not afford.

In this paper, I draw upon an expanded definition of public goods to argue that there are problems from both a political and an economic point of view with the notion of microfinance displacing the public sector as the provider of public goods and services. Politically it gives rise to equity concerns when the public sectors of developing countries are relieved of their responsibility to provide for their disadvantaged citizens; this legitimates a status quo where the state serves the interests of the elites while neglecting the poor. Institutionalising a system of “public provision for the rich, self-help for the poor” is objectionable regardless of whether marginalised populations develop modes of resistance, or are grateful for any services they receive at all. But the change from state provision to private access via credit is also economically worrisome in that it represents a micro-privatisation of access to public goods and services. I will show that private credit interventions are in no position to generate inclusive access to goods and services such as education, water or healthcare, and that a proper understanding of the theory of public goods and problems of collective action raises doubts about the capacity of individuals or households using credit to fund the provision of these types of services on a market basis at all. This paper focuses primarily on the latter economic arguments in order to develop a theoretically and empirically grounded critique of the application of microfinance to public goods. While the public goods angle is clearly but one approach to questions about the effectiveness and appropriateness of microfinance encroaching upon the state’s domain, this angle allows – more than, for instance, a moral argument or an investigation of political legitimacy – a direct engagement with the economic logic on which such projects implicitly and explicitly premise their actions. In particular, this paper shows that the idea that the poor should pay via microfinance loans for public goods holds a number of pitfalls which are not recognised by microfinance enthusiasts, and which fundamentally draw into question the feasibility of the model.

The paper begins in section 2 by introducing and explaining the concept of microfinance in the context of neoliberal restructuring and the rise of the vision of fragmented entrepreneurial development. Section 3 discusses the characteristics of the water and sanitation sector and examines the assumptions underlying proposals for using microfinance in generating access to public goods. An opposing theoretical analysis is proposed based on an understanding of public goods theory and a respect for social dynamics. In section 4, empirical evidence is reviewed from a study in Vietnam and the results are presented from my own fieldwork in India. These findings contradict the

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2 The word “institution” is not used in the sociological sense in most microfinance literature. The common terminology referring to organisations which deal in microfinance as “institutions”, something of a misnomer since they are actually organisations, is adhered to in this paper only for simplicity.
assumptions of microfinance proposals and point to problems of collective action and larger regulatory and institutional failures. The evidence is summarised in the concluding section with reference to the politics, public capacity, values and equity issues which are evident in the two cases.

2 Microfinance and the political economy of fragmented entrepreneurial liberalism

From developmentalism to microfinance as “ersatz developmentalism”

This section offers a brief account of what microfinance is and where the failures of regular microfinance lie, before introducing microfinance’s expansion into water and sanitation. Present-day microfinance comprises a range of financial services including small loans, savings and insurance for low-income demographics (“the poor”). But microcredit loans were the starting point of the industry and remain its principal business model to date. The notion that small loans should be used to encourage entrepreneurship and private enterprise amongst the poor is still the dominant story behind microfinance, though increasing weight has recently been placed on savings services. With microfinance, borrowers are expected to improve their socio-economic conditions by using loans for business ventures which allow them to accumulate capital for reinvestment and loan repayment with interest.

The microfinance sector is one in which state bodies and private investors play the role of creditor to poor people through private organisations known as microfinance institutions (MFIs). In 2010, 68.5 percent of cross-border funding came from public bodies, while the rest came from private investments and donations (CGAP 2010). In the present political economy of development characterised by liberalisation, debt recovery, fiscal retrenchment, privatisation and declining international development assistance, many “southern” governments and municipal service providers have seen their already limited capacities for investment diminished (Budds/McGranahan 2003, esp. 97–98). The decline of more traditional public sector development initiatives has accompanied the rise of microfinance investments to a point where microfinance now rivals all other development efforts. With at least 64.9 billion dollars, the global microfinance loan portfolio in 2009 exceeded the combined volumes of the US, UK, German and French foreign aid budgets. If the 1950s and 60s were the age of large-scale infrastructure development

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3 Mixmarket (2009); most recent estimate based on voluntary reporting by MFIs.
4 The four largest donors posted a development assistance budget of 63,230 million USD in 2009, contributing more than half of all DAC-registered foreign aid (OECD 2010). These budgets furthermore partially include an uncertain amount of governments’ and multilaterals’ support for microfinance programmes.
and industrial policy under the state-led growth model, the 1970s were the age of the basic needs approach (as a first step away from industrial policy), and the 1980s the “lost decade of development” (Emmerij 2010; Hoadley 1981), then the 1990s and 2000s may best be understood as the age of fragmented “neoliberal” or “entrepreneurial” models of development. These models are premised on self-help, self-sufficiency and an overarching distrust of the public sector and development aid. As Chang (2010: 2–3) explains:

Since the rise of neo-liberalism in the late 1970s and the early 1980s, many people in the rich countries, both inside and outside the academia, have come to take the view that the developing countries are what they are only because of their own inabilities and corruption and that the rich countries have no moral obligations to help them. Indeed, there is a growing view that helping the developing countries is actually bad for them because it will only encourage dependency mentality.

Microfinance loans replace social policies and transfer programmes intended to alleviate poverty, with finance aimed at encouraging poor people to undertake small business activities (Weber 2010). Microfinance is thus expected to create economic development in a fragmented and uncoordinated fashion as an aggregate of individual micro-entrepreneurship based on a supply of small-loan finance. However, this expectation contains a number of erroneous assumptions, and does not withstand scrutiny in the light of the slow growth of countries such as Bangladesh, where microfinance has penetrated so deeply in the past three decades that 25 percent of the population now have a microfinance borrower account (Bateman 2011). The fact remains that in successfully developing countries and in today’s rich countries,

the microfinance model has played no role whatsoever. On the contrary, these countries have very successfully reduced poverty and have grown rich(er) overwhelmingly by using a range of state coordinated policy interventions, financial institutions and investment strategies that are not only the complete opposite of today’s “new wave” microfinance model, but also – and this is the rub for those in the microfinance industry that might argue for “policy co-existence” – very likely to be undermined by the proliferation of microfinance and its prior claim over savings and other important financial resources. (Bateman/Chang 2009: 5)

Chang (2010) therefore refers to microfinance promotion by international organisations and policymakers as part of an “ersatz developmentalism” based on the belief that rational, self-seeking entrepreneurial individuals will create a prosperous economy through their fragmented and uncoordinated market activities. Because of these assumptions the concept of microfinance as a tool for development is fraught with difficulties ranging across the fungibility of loans (many of which are used for consumption and other “non-productive” purposes), the limited entrepreneurial opportunities open to poor people (Karnani 2009), predatory lending practices, the general lack of essential public goods and the anti-developmental macro- and micro-economic environments that characterise poor communities marked by a highly polarised ownership of factors of production and unequal social relations.5

5 These notes must suffice here, but an authoritative theoretical and empirical critique of microfinance can be found in Bateman (2010) and more recently, from a feminist angle, in Karim (2011).
Microfinance accumulation and crises

In situating the locus of development and accumulation in simple individual private entrepreneurial activities activated by profit-oriented credit, microfinance applies the neoliberal paradigm of full cost-recovery to development assistance. This paradigm holds that the full cost of all goods and services should be borne by their recipients. This is key because in microfinance it is the profit orientation of private credit institutions which is supposed to ensure the recouping of all costs associated with the intervention. And some MFIs have indeed proven their capacity to earn substantial profits. For example, the five largest MFIs in India, the world’s biggest microfinance market, posted an average yearly return on equity from 2005 to 2009 of 36.9 percent. But regardless of the business success of some MFIs, it is increasingly apparent from even the most well-intentioned studies that microfinance loans for entrepreneurship fail as a tool for economic and social empowerment; see Karlan and Zinman (2009) and Banerjee et al. (2009), both best in their original 2009 versions, or for a recent digest, Strauss (2010). Microfinance is not the “modern Robin Hood” some have claimed it to be, but rather upholds an unjust status quo. As Servet explains, microfinance should be recognised as constructing an abstract relation of exploitation between lender and debtor in place of the more traditional relation between capital-owner and labourer.

The neo-liberal accumulation system led to a deterioration of labour compensation in favour of capital, and for large sections of the population in several countries, the need to compensate this loss in purchasing power by resorting more and more to credit. In the case of micro-credit, there does not seem to be a monetary relationship of the employer/employee type, and this could suggest that there is no exploitation of workers … But all in all, the interest payments for the loans which enable production or exchange activities to be carried out, correspond to a levy on the income obtained through these activities. There is no capital/labour relation at interpersonal level. But as a whole, there is transfer from one sector to another. (Servet 2010: 12)

By expanding the reach of financial markets all the way to the poorest sections of society, microfinance generates new financial linkages between rich and poor. On the one hand microfinance gives the poor access to previously inaccessible services (“financial inclusion”), while on the other it creates channels for surplus accumulation and transmission of the risk inherently associated with financial markets – a financialisation of development. While easier access to credit can be politically placating by acting as a vehicle and cushion for the vagaries of “disciplinary neoliberalism” (Gill 1995), we learn from Harvey that the ever-growing importance of finance tends to exacerbate instability and risk. “The credit system is a product of capital’s own endeavors to deal with the inherent contradictions of capitalism” (Harvey 1982: 239), albeit an ineffective one, since it first internalises and then exacerbates disequilibria and imbalances.

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6 Mixmarket (2009a). Own calculation of Return on Equity using Mixmarket data to determine a five-year weighted arithmetic mean for the five largest MFIs in India according to gross loan portfolio as of 2009: SKS, Spandana, Share, Bandhan and AML.

7 Byström (2006) seriously asks whether microfinance-collateralised debt obligations should be seen as “a modern Robin Hood”.


This creation of new imbalances through finance also holds true in the case of microfinance, which has seen a number of crises in its brief existence, including those in Russia, Bolivia, Argentina, Bosnia, Pakistan and Morocco (Constantinou/Ashta 2011; Chen/Rasmussen/Reille 2010), where political and economic miscalculations of risk brought microfinance operations to the brink of collapse. In Nicaragua, it has largely come to an end. The achievements claimed on behalf of microfinance look particularly questionable against the background of the most recent crisis, which began in September 2010 in Andhra Pradesh, triggered by a wave of client suicides that exposed predatory lending practices, market oversaturation, dishonest interest rates, and coercive recovery methods. Under conditions of cutthroat competition in an intransparent and crudely regulated microfinance marketplace, microfinance institutions (MFIs) had recklessly overextended credit, using the Indian government’s priority sector finance targets and international investors’ money to expand their lending and feed a spiral of client debt (Dharker 2010; Kinetz 2010; McRae 2010). The bubble burst shortly after the initial public offering of the leading MFI, SKS Microfinance, when the Andhra government clamped down on microfinance activities in an effort to stem the suicide wave.

Microfinance meets water and sanitation: Past and present

In the past, microfinance has acted not only as a political facilitator for financialisation, state restructuring, and fiscal retrenchment, but also as a stand-in for the caretaking function of the state. Microfinance has allowed policy-makers to replace welfare transfers and public goods provision with easy credit – a “political safety net”, to use Weber’s (2001) term – and has accompanied privatisation policies directly and indirectly since the 1980s. Water sector privatisation and microfinance expansion go especially hand-in-hand due both to their synergies in facilitating state expenditure reduction and their labelling as “pro-poor”. A detailed account by Gill (2000) shows that the introduction of microfinance interlocked with the privatisation and marketisation of urban water supply in the execution of the Bolivian Structural Adjustment Program (SAP). Water tariffs and connection fees were increased regressively in a drive for full cost recovery, ostensibly aiming at network expansion but practically excluding poorer users (Olivera 2004; Spronk 2007), while microfinance expansion mitigated popular pressure on the state for social services. In another example, the World Bank included an expansion of microfinance in its planning of privatisation and utility reforms in Burkina Faso (Nankobogo 2001). The more recent projects studied in depth in this paper, in which microfinance is proposed as the agent for water and sanitation expansion, integrates these two previously parallel trends even more closely. This is the synthesis of water marketisation and microfinance expansion.
Underlying the idea of using microfinance for water (and other public goods) is a paradigm shift noted by Reis and Mollinga in connection with water and sanitation. “Due to the finance gap in the RWSS\(^8\) sector and the paradigm of cost-recovery, microcredit schemes have globally become a popular element of RWSS policies in recent years” (Reis/Mollinga 2009: 3, emphasis added). By extension, this paradigm shift applies to other public services where the view is also promoted that public sector financing gaps could be counteracted by fully recovering costs through the private sector. This paradigm favours a fragmentation of service provision into smaller, ostensibly more efficient, businesslike units. By adding in the notion of enabling payment through microfinance, where each person contributes to the production and consumption of the public goods to the extent that they have access to loaned capital, it is possible to identify the role of microfinance as effectively micro-privatising public goods and services. This small-scale privatisation, which takes place through the back door as it is not (formally) politically mandated, is fundamentally grounded in the same entrepreneurial vision of human relations that has guided regular microfinance so effectively. However, the key difference is that microcredit programmes function here directly as “a low-cost substitute for public investment in health, education, and infrastructure” (Gill 2000: 146), instead of as a “political safety net”. But even a low-cost substitute may be difficult to attain if the characteristics of public goods are properly considered, as the following section shows.

3 Analytical framework: The public goods/collective action problematic in water and sanitation

Services such as water and sanitation, education, healthcare, electric power, peace and order\(^9\) may be understood variously as basic services, essential public services, services of general interest or public utilities. Like most goods, these goods require the presence of a provider – whether state, municipal, philanthropic or private – to ensure their production; and after production they may be distributed according to different arrangements ranging from free public access to access based on needs assessment, or complete private access premised on an individual’s capacity to pay. But neither the rubrics of essentiality, utility or general interest, nor the metrics by which they are distributed, can capture the defining characteristic of these goods or services. Their existence is not explicable by the fact that they are necessary or particularly useful especially since most poor societies suffer from a lack of them. The key characteristic of these goods and services is that, to a large degree, their benefits are difficult to internalise privately.

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\(^8\) RWSS = Rural water supply and sanitation.
\(^9\) All of these have been suggested as targets for microfinance interventions. For electricity see: Kabir/Dey/Faraby (2010); irrigation: Muhammad (2005); health: Parker/Singh (2000), Pronyk/Hargreaves/Morduch (2007), Dohn et al. (2004), Leatherman/Dunford (2010); education: Khumawala (2009); peace and order: Heen (2004); water and sanitation see references below.
for their producers and consumers, while the exclusion of some users generates detriments for others. For this reason they are referred to in this paper as public goods. Due to the spread of benefits over wider groups of actors, the question of how public goods are produced and distributed is inherently linked with the problem of collective action, whereby social actors must cooperate in order to achieve their shared interest. Therefore, this section approaches the provision of basic or essential public services via microfinance from the viewpoint of the public goods/collective action problematic.

The argument proceeds from a historical explanation of the shifting roles of the public and private sectors to an account by promoters of such models on how microfinance is intended to improve access to water and sanitation. The subsequent theoretical analysis of the characteristics of water and sanitation points to the importance of their public-goods characteristics, which reflect ways water can be used as well as the societal decision-making mechanisms influencing how water is governed. Furthermore, improved water and sanitation are found to show important merit and network characteristics. As a result of these findings, I expect that fundamental collective action problems related to the public-goods problem will arise when private credit is directed towards the production of public services that are usually provided by the state or through other collective means.

**Water and sanitation: Histories of inequality**

In historical and cross-country comparisons the key role of public-sector governance in water and sanitation provision can be clearly seen. In today’s wealthy capitalist economies, urban water systems began developing by the late seventeenth century, but for a long time only as a service exclusively for affluent customers. These networks were municipalised during the nineteenth century in nearly all European countries (the exception being France) in order to ensure comprehensive network coverage and more efficient operations by capitalising on economies of scale and the better capacity of municipalities for “borrowing long-term money from local savers, at low interest rates because of the security of their flow of income from taxes” (Hall/Lobina 2006: 3). On the other hand, most developing countries’ water systems from that time were developed only to fulfil the needs of colonisers, which has left a legacy of incomplete and truncated network coverage. As Hall and Lobina (2006: 6) explain:

> Water supply in developing countries has a different history. In the colonial period, whilst the imperial countries were extending public networks in European cities, water supply in the colonies was focused on a colonial elite. The restrictions were economic as well as political. Even where systems were extended, the local population had to pay charges based on full cost recovery, without benefit of cross-subsidy, meaning the service was unaffordable to the great majority.
After independence, many countries placed control over water and sanitation in the hands of central governments due to the underdeveloped capacities of local bodies. Unequal network coverage continued because of the failure of suppliers to react to rapid growth and urbanisation thereby neglecting the new, and especially informal or illegal, settlements.

The privatisation drive of the 1980s and 1990s linked with Structural Adjustment Programmes saw a renewed emphasis on the decentralisation and marketisation of water governance. Advocates of privatisation saw the attraction of private equity for urban networks and the creation of fragmented small-scale local enterprises in the water sector as the solution to the failings of the public sector (Segerfeldt 2005). But the privatisation drive failed both economically and politically – private operators failed to improve services and earn profits, and privatisation itself was met with widespread political resistance from citizens-turned-customers (Shiva 2002; Swyngedouw 2005). The proportion of water supply systems operated today by the public sector in low- and middle-income countries is at least 95 percent (Hall/Lobina 2006), and in all parts of the world there is a trend towards the re-municipalisation of water and sanitation that had been privatised (Hachfeld 2008). Private investment is not as forthcoming as expected, and for good reasons many governments are becoming and remaining involved again in the water sector.

Central government has the broadest and most equitable tax base, so it is not surprising that central government plays an important role in many countries. It continues to play a significant role even in high income countries … Following the failure of private concessions, private equity cannot be expected to be a significant source of finance. Attempts to involve local contractors are not likely to change this: small-scale local enterprises in developing countries are even less likely to provide capital to finance investment on the scale required than multinational companies. (Hall/Lobina 2006: 22–24)

In 2002, an internationally codified Human Right to Water under the International Covenant on Economic, Social and Cultural Rights (ICESCR), which includes sanitation, was established (ECOSOC 2003). This human rights approach is grounded in international law derived from early post-war human rights formulations, and was progressively carried towards legal enshrinement by various transnational civil society organisations and social movements (Anand 2007; Salman/McInerney-Lankford 2004; WHO 2003). Legal scholarship has understood the human right to water as unconditional and entitlement-based, independent of political and economic circumstances and irrespective of peoples’ capacity to pay. “Categorizing a right to water as a human right means that: fresh water is an entitlement, rather than a commodity or service provided on a charitable basis” (Bluemel 2004: 973). However, the codification of the Human Right to Water is comparatively recent, and with very few exceptions, such as South Africa’s lifeline water supply (Bakker 2007), it has not yet explicitly provided the basis for national or regional water policy.
Claiming the “win-win”: Recognition, internalisation, capitalisation

The slowly resurgent role of the state in the 2000s has coincided with the rising acknowledgement of water and sanitation as unconditional entitlements, placing the onus on governments and international institutions to access or make available the appropriate finance for supplying the poor. At the same time, projects aiming at using microfinance to provide water and sanitation have also risen to the fore, which I contend have the effect of reversing this process by introducing a new type of financial source: the poor household itself taking out credit. Like the private equity water investments of the 1980s and 1990s, the credit for microfinancing comes from capital markets, but the model also appeals to the ideal of small-scale enterprise-driven supply. Unlike earlier, more explicit privatisation initiatives, however, microfinance supporters do not openly call for a privatisation of water, and some maybe do not even consciously advocate it. But access to the system by individuals is privately organised as a consequence of the dependence of the model on private loans. I contend that by making water and sanitation access dependent on private credit access, this model privatises what matters for the poor, which is actually water and sanitation access and not the water and sanitation system itself.

The idea to use the resources of the rapidly-growing microfinance sector to secure access for the poor to water and sanitation has been growing in popularity approximately since the beginning of the millennium. As one recent online microfinance publication observed, “The latest craze in the creative use of microfinance as a generator of positive externalities is the use of microcredit for the provision of clean water” (Jenkins 2011). The same article, however, also noted, “there are some potentially significant barriers to its implementation that would occur to any critical thinker”. While small pilot projects have been around for years, the case for microfinancing water and sanitation has been made most influentially by the Bill and Melinda Gates foundation in an extensive 2008 report.

The importance of microfinance in financing water supply and sanitation services (WSS) has been recognized in several recent reports and workshops. They highlight the potential for using microfinance to meet the financing needs of poor and low income groups for improved access to higher-quality water and sanitation services … A review of microfinance programs for WSS suggests that while there are many pilots, very few have achieved scale. More importantly, the review also highlights that only a few large MFIs show an interest in the water and sanitation sector, because it continues to be relatively unknown and is perceived as high risk. In order for microfinance to be scaled, then, these perceptions will need to be changed, by demonstrating a clear business case to MFIs and other financial sector institutions … The highest potential for making a clear business case is through individual retail loans for sanitation. This is followed by water supply loans through retail and SME-type loans for small water investments. (Mehta 2008: 4–5, emphasis added)

The central premise of microfinance solutions for provision of water and sanitation (as well as for education, healthcare, etc., as discussed above) is that small loans from private MFIs can and will, given appropriate programme design, act as a substitute for
provision by the public sector. That premise is rarely made explicit in the literature, though it is evident in the underlying assumptions which Varley (1995: 5), the first author to suggest microfinance for water, elucidated in his argument:

Municipal or state-owned utilities are often inefficient, overregulated, and unable to supply even the formal sector with adequate services. Subsidies through tax transfers and foreign aid/borrowing are becoming more difficult to secure.

In such a view, the public sector is by definition incapable, and aid and tax transfers will naturally decline over time; fragmented and individualistic business approaches, on the other hand, are seen as having the capacity both to attract finance and to deliver.

Microfinance models promise to help extend access to crucial goods by “leveraging market-based resources” (Mehta/Knapp 2004: 13) through the private credit system – privately provided through MFIs; privately used by households – which would offer poor people a supposedly welcome opportunity to finance their own access to water and sanitation. Service providers (of water, sanitation, credit) should be able both to recover costs via households using loans to pay for the full cost of utility provision, and to repay loan principal and interest from the private gains they receive from the utility provision. These novel approaches to water and sanitation hope to capitalise on what has become a mantra of the microfinance industry: “the poor always pay back” (Dowla/Barua 2006). Supporters of microfinance models believe that it is only the profit motive for MFIs that can maintain the situation and therefore routinely warn against public subsidies for household water and sanitation for fear of “crowding out potential private sector resources” (Mehta/Knapp 2004: 12, emphasis added). “Experience in microenterprise lending has demonstrated that cost recovery should be central rather than peripheral to the design of sustainable financing mechanisms,” as Varley observed early on (1995: 3). Water projects are therefore supposed to build on the ostensible successes of MFIs at providing social value through private enterprise (Intellecap 2009), for which an “enabling environment” for private investment is seen as crucial (Agbenorheri/Fonseca 2005: 5; Mehta/Virjee/Njoroge 2007).

The nexus of provision in these models is situated squarely at the local level, with organisations following explicitly business-oriented models of provision, and the burden of payment for water and sanitation is situated specifically at the household financial nexus. Public provision and or welfare transfers are excluded from the model.10 In this way, water and sanitation supply is fragmented and individualised. Both the supply of and the demand for water are in an important sense entrepreneurialised. MFIs are expected to realise the profit opportunities presented by specialised loans for water and sanitation improvements, and the borrowers are to expected to eagerly take advantage

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10 Even though in both empirical cases presented in section 4, public providers and subsidies/grants were involved. That by itself should cast doubt on the claim that a business-only approach can be successful.
of these loans, given their private gains, as an entrepreneurial opportunity for livelihood improvement. According to Mehta (2008), the benefits to improved water and sanitation are mostly private – which they must be, in order for a business case to make sense.

Based on these assumptions and premises, microfinance-based models for the provision of water and sanitation claim a private “win-win” situation for both actor sets: financial benefits for households and increased profits for suppliers of water and credit. Providers are assumed to be motivated plainly by the business case. The commonly assumed motivations for households are more heterogeneous but also fit into a cost-benefit framework, focusing on savings in medical bills, extra earnings due to less time spent out of the labour market due to illness, time-savings for female household members which can be invested in productive activities (market-oriented labour), increases in house value, and the productive use of water (e.g., for cattle rearing). One of Mehta’s assumptions, put forward by her as a statement of fact, is that “the time that is saved is generally used in economic activities that fetch extra income, or in better child care” (Mehta 2008: 43). This assumption is important, because it reveals how the suggested benefits of water and sanitation must have a financial payoff in the short or long run in order for a microfinance-funded model to make sense.

I suggest that the “win-win” situation proposed in such models, which requires private benefits to accrue to all parties, necessitates successes in a three-stage process at the household (“beneficiary”) level. First, household decision-makers must be able to recognise the private benefits from clean water and sanitation, which incentivise them to take on debt now in order to reap future returns. Households must then be able to internalise these benefits; that is, reap enough benefits as their private gains to make it worthwhile for them to have undertaken the investment. Finally, in order to repay the loan, households must be able to capitalise these benefits; that is, they must translate them into actual money, from which repayment can be made.

A failure at any one of these stages would interrupt the “win-win” situation hypothesised by advocates of using microfinance for water, and make success unlikely. First, without households’ recognition of the benefits, there will be no demand for loans to finance water and sanitation access; a loan might make objective sense, but without subjective recognition it will not be demanded (or will not be used for the intended purpose). Second, if households cannot internalise the benefits, then the household itself does not “win”; for instance if the water supply system fails to deliver sufficient water to the house after the investment was undertaken, or if the benefits from one household’s sanitation are spread out over the entire community and hardly accrue to the individual household. Finally, if households cannot capitalise the benefits, then either the MFI does not “win”, since it cannot enforce payment from a destitute household and must write off the loan, or the household does not “win”, since it must pay the principal and interest from unrelated revenue sources (or through another loan, for instance from a moneylender), incurring
a financial loss on its investment. Capitalisation problems could occur if the benefits to the household are private but non-monetary, such as time saved by a female household member who does not subsequently engage in market-oriented labour in the extra time.

**Problematic goods theory: Characterising a fluid resource**

Put simply, the problem of the microfinance model is that water and sanitation are treated as if they were private goods. As I contend here, the resources involved are not at all clearly-cut private goods, and they confound the simple market-oriented models put forward in microfinance models. First, a brief definition is necessary of the precise goods in question before proceeding to a discussion of their characteristics. Water as a development problem usually refers to drinking water and safe water for other basic domestic purposes, while sanitation refers to the safe disposal of human bodily waste and sewage, which in turn impinges upon water quality. The “problem of water” then, as understood from a development perspective, is less one of absolute quantity of the natural resource water or its conservation (though these are related concerns), but rather one of insufficient water quantity and quality relative to immediate human needs. The “problem of sanitation” is that of preventable quality depreciation of both water and the environment resulting from inadequate sanitary facilities and practices. The following discussion refers specifically to household water and sanitation but also connects to the larger issues of water as a good. I discuss three main problems in treating water as a private good: water’s non-private characteristics, water’s fluidity, and the merit characteristics of water networks.

*Household water and sanitation are not private goods.* At first sight, it may be difficult to decide how to categorise and analyse water and sanitation as specific types of goods. But a few key arguments using economic theory can be made in favour of understanding water and sanitation at least as *non*-private goods. Mainstream economics traditionally distinguishes between four types of goods, which it classifies along the dimensions of excludability and rivalry: private goods, public goods, club goods and common-pool resources (see Figure 1). This school treats the existence of public goods as an instance of market failure, since the market-oriented rational behaviour of gain-seeking individuals will not produce “efficient” (i.e., desired) quantities of public goods. All positive externalities cannot be priced into the goods by market participants; this leads only to a level of provision where benefits can be internalised, which is less than the socially optimal level. In a decentralised system of decision-making, resources with public-goods characteristics will therefore be underprovided and collective action means for their provision must be found (Samuelson 1954).

Such an economic analysis of public goods is further complicated by the rarity of pure public goods, or any “pure” goods at all that accord with the above typology. Contrary to parsimonious theory, most goods actually lie on a continuum between public and
private. As to where exactly the line between public and private goods runs, economic theory offers only deceptively precise boundaries which are defied by most real-world goods. As Samuelson himself pointed out (with reference to the example of subscription-based television services),

the essence of the public-good phenomenon was not intrinsically tied up with the inability to “exclude” consumers from some common service … even if … [it were possible for] such exclusion to take place technically, we should still be faced with an instance of intrinsic increasing returns and that in all such cases there is an element of the public good dilemma.
(Samuelson 1964: 81)

The categories of non-excludability and non-rivalry then are not only imprecise, they can also conflict with the social considerations and societal institutions that define what is actually commonly managed (and how it is to be managed) against what is managed as a private good. The subordination of goods to societal institutions applies particularly to those which constitute essentials for a “decent life”, are recognised as having an intrinsic value, or yield public benefits, as Kaul and Mendoza (2003) point out. Instead of economic characteristics automatically determining the distinction, the true distinction between public and private goods (as well as between other types of goods) is socially constructed.

As Malkin and Wildavsky (1991: 355) argue, public goods “are public because and only because society chooses to put the goods in the public sector instead of the private sector”. Therefore, we should note a difference between the “basic” (economistic: non-rivalrous or non-excludable) and “actual” properties11 of goods, “those that society has assigned to them” (Kaul/Mendoza 2003: 80). Goods may be produced or governed by public institutions for reasons including tradition, equity, spirituality, economics, politics, morality or other socially expressed concerns. Satz (2010), for instance, suggests

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11 Kaul and Mendoza’s use of the word “properties” is avoided in the following text in favour of the word “characteristics” to avoid confusion with properties in the sense of property rights.
that societies deem markets in certain goods to be “noxious” for four reasons, even where a market outcome may be economically “efficient”: if they (1) lead to extremely harmful outcomes for individuals, (2) undermine social and political equality, (3) are characterised by highly asymmetric information, or (4) are based on underlying vulnerabilities of market actors. Water and sanitation fall into the fourth category of markets characterised by a high vulnerability of actors since they fit Satz’s criterion of being “markets in a desperately needed good with limited suppliers” (Satz 2010: 98).

A closer inspection of household water and sanitation using Kaul and Mendoza’s distinction reveals both important basic and actual characteristics that qualify these goods as anything but private. This is particularly true at a level of basic (minimum) provision. Any individual’s access to water and sanitation depends on, and in turn affects, underlying common-pool resources which require collective action solutions for their inclusive and sustainable management. Unregulated, uncoordinated private use will tend to deplete the resource as one household’s consumption (for instance through a private borewell) drains the common freshwater source. Similarly, one household’s usage of inadequate sanitation (for instance engaging in open defecation) pollutes the water on which its own or other communities depend. Furthermore, actual water usage is usually subordinated in some form or other to social norms and governance systems in most societies, as authors such as Elinor Ostrom (2000) have shown at length.

To illustrate the conflict between inherent economic goods characteristics and societal choices, briefly consider the example of education. Access to instruction, classrooms and materials is perfectly excludable and is largely rivalrous so that under conditions of anarchy or market purism we would find only those pupils enrolled who are willing and able to pay the full costs of education. This is provision premised on the “basic” characteristics of the good. However, even those societies which are usually characterised as “market-liberal”, such as Britain or the USA (Hall/Soskice 2009: 32), operate public — that is, free-at-point-of-use taxpayer-funded — schools to ensure inclusive access to a certain basic standard of education, and even enforce compulsory school attendance. Underlying this choice is the societal recognition that benefits from education stretch so far into the long term that they may not be recognised by many individuals, that they are so wide-spread in terms of positive externalities that individuals may be dissuaded from bearing them themselves, and that the costs are diminishing at the margins to the effect that including one child while excluding another makes little cost difference to the provider. Yet, in the final instance, the most important factor of all in bringing about universal basic education may be simply the intrinsic value ascribed to education by societies: the “actual” characteristics of the good “education” are truly a social choice.

Water is a fluid resource. Based on the foregoing discussion, it is clear that a simple economic categorisation of water and sanitation as either plain private goods or pure public goods would fail to capture the attributes of water and sanitation in the real world. But water and sanitation do not only have multiple attributes which situate them somewhere on a continuum between public and private; their attributes also change over time and
space through natural processes and human interference. For instance, the facilities for accessing a common-pool resource, such as an aquifer or a river, may be in private ownership, such as a private borewell or pumping station, but the common-pool resource itself is still public. Which water is given emphasis – either the water in the ground and in the river, or the water which has been piped away – is a question of perspective.

Water, in the different stages through which it moves, is one of the goods that has a “dual status” in Kaul and Mendoza’s (2003: 84) framework – or even, I argue, multiple statuses. It depends on which phase of the water cycle is being analysed, for in the course of its cycle of usage and regeneration, water flows through all quadrants of the Figure 1 matrix. The resources of water and sanitation fit into each category of economic goods at a certain stage, even under conditions of pure market provision or when regarded solely by their “basic” characteristics. Figure 2 shows this with reference to water.

Moving clockwise from the bottom-right, the practically infinite supply of water in an ocean is a public good in that it is neither rivalrous nor excludable. Rainwater too is public until it is privately captured. On the other hand, water in a river, an underground aquifer, or delivered from a public standpipe is rivalrous in that one person’s use diminishes another’s use but individual users cannot be excluded except through legal constructions (ownership of water lying on or under land) or physical hindrances. Water which has been claimed for private use – and in the legitimacy of this claim lies one frontier which is patently subject to social construction – such as water in a bathtub or in a bottle, is rivalrous since one person’s use renders it unusable for others and excludable (contingent upon the property rights regime). Finally, the club goods category is most difficult to establish with respect to water, but when realistically conceived of,

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Figure 2 Different types of water according to “basic” characteristics

<table>
<thead>
<tr>
<th>Excludable</th>
<th>Non-excludable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rivalrous</td>
<td>Non-rivalrous</td>
</tr>
<tr>
<td>Bottled water, bath water during use</td>
<td>Large private lake, network water</td>
</tr>
<tr>
<td>River water, aquifer water, public standpipe water</td>
<td>Ocean water, rain</td>
</tr>
</tbody>
</table>

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12 Sanitation should be understood here as an inverse of clean water usage, i.e., the prevention of dirty water.

13 Ironically, Bolivia’s infamous Cochabamba water privatisation scheme actually involved a privatisation of the right to collect rainwater, via licenses (Dalton 2001). Households were legally forbidden from harvesting rainwater on their roof or their land.
some forms of water also fit this category. For example, large amounts of water in a
different private lake in a lowly-populated area may be excludable, but are non-rivalrous. Crucially for household water, water in piped distribution networks is also excludable (via metering or disconnection in the event of non-payment) but is to a large extent non-rivalrous. The network serving one house only exists if others are willing to be part of it (rather than opting out), and water only reaches one house if enough pressure is in the pipes for it to reach other houses. These network characteristics are discussed in further detail below.

Therefore, while water may be acquired, sold, used or depreciated privately at various interfaces, eventually it always re-enters into common flows or pools, and must do so in order to recreate itself as a valuable resource for human use. Water and sanitation have more than “dual status”, they have multiple statuses which change over time and can be affected through human activity. It is up to societies to determine which status(es) receive emphasis in their water governance systems and water projects. If microfinance programmes serve to construct water and sanitation as primarily private goods, they neglect the other forms water takes, which may cause unexpected consequences. For instance, financing private devices for access without ensuring the availability of the common resources underlying that access will render the private devices ineffective.

Household water is a network good with merit characteristics. As the discussion above suggests, especially in light of the issue of excludability, any system of supplying clean potable water and sanitation to multiple households represents a merit good in that there are significant benefits for the general public from each additional household’s access. For instance, a household with access to clean drinking water and sanitary facilities is less likely to contract and spread water-borne diseases, which regularly create direct high costs, unnecessary suffering and foregone opportunities for communities. Put simply, the greater the spread of water and sanitation, the greater are its benefits.

We can expect the merit effect to increase with a greater sophistication of water and sanitation systems; more modern and effective systems are more capital-intensive and more centralised. Given the network characteristics of improved water and sanitation – “improved” refers here to household units connected to a supply/removal system – significant economies of scale are attainable only by inclusive access.14 Drilling borewells or laying water pipes to supply a single household is inefficient when compared to supplying an entire street or neighbourhood, so it is neither desirable to exclude households from the resource nor is the use strictly rivalrous, since one user’s access co-depends on the other’s access. The microfinance discussion hardly touches this point when noting in one instance that “preliminary results suggest that microlending may be an effective means of helping households in communities with existing trunk infrastructure to ac-

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14 For basic (non-improved) sanitation, where simple and only partly hygienic systems such as pit latrines are used, there are fewer economies of scale. However, for advanced sanitary systems involving piping and centralised sewage treatment, the same network effect applies as it does to water.
cess improved water supply and sanitation services in their homes” (Davis et al. 2008: 891, emphasis added). But Davis et al. leave aside the question of where the trunk infrastructure actually comes from. Given the strictly private view taken by microfinance advocates for water and sanitation, ignoring the systems perspective comes with the territory. For as Hall and Lobina (2006: 17) explain:

Water services depend on an extensive network of pipes, pumping stations, treatment plants, and reservoirs. As a result, a very high percentage of the cost of water systems is the cost of investments in this network, and so water is a very capital-intensive sector. Extending water services to all requires a lot of capital to finance the new networks, and it is very expensive. Those still needing connecting are poor, and the resources required to connect them cannot be provided by the poor themselves. There has to be distribution from those with greater incomes.

This section began by showing how private attempts to construct systems have historically tended to service only affluent customers, while inclusive water and sanitation systems grew under the aegis of the public sector. It also briefly discussed how attempts to privatisate systems in the recent past failed politically and economically. Amidst a slowly resurgent recognition of the public sector’s importance, the growth of microfinance as a water financing tool nonetheless threatens to privatisate access by focusing on the “business case” (Mehta 2008) for water and sanitation provision. Several assumptions about public goods are followed in that model. At one level, the business case is premised on the recognition, internalisation and capitalisation of private returns by the beneficiaries, all of which were found to run into problems in the two case studies from Vietnam and India discussed in the following section. But at another level, water and sanitation show crucial “basic” and “actual” non-private characteristics because they are fluid resources with changing statuses, and their systems are networks.

The following case studies demonstrate that in practice the private aspect of microfinance projects for water and sanitation conflicts in a number of ways with the collective level on which project success depends. The cases show the different ways network providers failed to deliver the service required for a return on the investments made by households, unequal uptake threatened the impact of the projects as a whole, and the political level had the power to make or break the projects.

4 Field evidence from Vietnam and India

In this section, I first discuss the findings presented by Reis and Mollinga (2009) and Reis (2010) from a case in Vietnam. I follow with my own findings from fieldwork conducted in Andhra Pradesh (southern India) between January and July 2010. At present, these are the only two known social science studies of cases in which microfinance was used for water and sanitation.
The particular combination of the two cases from Vietnam and India permits a logic of maximising variation by examining two very different approaches to applying microfinance to water and sanitation. The cases differ on key dimensions in terms of setting and institutional design, which are outlined in Table 1. As is elaborated below, the Vietnam case is one in which credit from a state development programme funded by state donors was used to address a lack of rural water and sanitation. This programme was implemented in the context of a statist economy through state-organised local committees. The Andhra Pradesh case, on the other hand, saw credit disbursement from private MFIs complemented by funding from an international private philanthropic source, which was used to address urban and peri-urban water and sanitation problems. The project was implemented in a relatively liberal market economy setting through NGO-organised women's Self-Help Groups (SHGs). The differences between the features of these two cases should allow us to account for potential differences in outcome.

These cases differ, as empirical reality may be expected to, in some ways from the model set up in theory by microfinance advocates, which I outlined in section 3. Neither case represents a “pure” application of the model, and in fact in exploratory research no models operating in full accordance with the theoretical model were found to exist anywhere. The cases in India and Vietnam therefore depart in certain respects from the very simple model proposed in theory, especially in respect to full cost recovery and exclusive private sector activity. Both models were subsidised in different ways and partially depended on non-market actors such as NGOs and public bodies for implementation. The findings presented below should therefore be read in light the fact that the pure, disembedded, market-only model was not applied in its full severity. Based on the discussion in the previous section on the public-goods characteristics of water and sanitation, the collective action problems discovered in practice in both cases should be exacerbated by the removal of subsidies and the addition of private water and sanitation providers.

### Table 1 Setting and institutional design of the Vietnamese and Indian cases

<table>
<thead>
<tr>
<th>Differences</th>
<th>Vietnam (Can Tho)</th>
<th>India (Andhra Pradesh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>rural</td>
<td>urban/peri-urban</td>
</tr>
<tr>
<td>Funding sources</td>
<td>foreign state donors</td>
<td>philanthropy and private sector</td>
</tr>
<tr>
<td>Funder organisations</td>
<td>state development bank</td>
<td>donors, MFIs, moneylenders</td>
</tr>
<tr>
<td>Implementing organisations</td>
<td>provincial and local administration</td>
<td>NGO and SHGs</td>
</tr>
<tr>
<td>Political-economic setting</td>
<td>statist</td>
<td>market-liberal</td>
</tr>
<tr>
<td>Project targets (a)</td>
<td>—</td>
<td>communal drinking water plants</td>
</tr>
<tr>
<td>Commonalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project targets (b)</td>
<td>tap water connections and household sanitary latrines</td>
<td></td>
</tr>
<tr>
<td>Climate</td>
<td>tropical with wet and dry seasons</td>
<td></td>
</tr>
<tr>
<td>Groundwater</td>
<td>depleting and partly contaminated</td>
<td></td>
</tr>
<tr>
<td>Population growth and urbanisation</td>
<td>high growth in both cases; urbanisation in Andra Pradesh, unclear in Vietnam</td>
<td></td>
</tr>
</tbody>
</table>
Can Tho, Vietnam

In four southern Vietnamese rural districts of Can Tho City (a geographically extensive municipality with majority rural areas), Nadine Reis and Peter Mollinga initially found catastrophic sanitary conditions. Most rural and peri-urban households used the same rivers and canals for sewage disposal on which they traditionally depended for drinking and domestic water. They especially relied upon these water sources during the dry season. Agricultural pesticides and industrial waste were also found to be contaminating the waterways. Households used a mix of piped water (where available), borewells which were rapidly depleting, seasonal rainwater, river water, and some other minor sources. Many households located within piped water supply areas could not afford the administrative and technical costs of a connection, especially since the rural setting often resulted in high costs for connecting from mains pipes to houses that the water board would not cover.

In a programme begun in 2004, microloans of up to some 320 euros supplied at a low nominal (negative real) interest rate were channelled from the Vietnam Bank for Social Policies (VBSP) via the local health administration and a provincial agency responsible for rural water supply (CERWASS) to households seeking to upgrade their water and/or sanitation facilities. This was done as part of a programme to reach the United Nations’ Millennium Development Goals supported with government funding from Denmark, Australia and the Netherlands. The predicted full cost of the various latrine options (and the size of the loans) was between 40 and 160 euros, though households complained that the costs were actually far higher, in an area where the per capita poverty line lies at 8 euros monthly income. The scale of the programme was large given the local demographic.

Up to May 2008, 20,583 constructions were implemented within the programme, of which 13,988 (68 percent) were for sanitation and 6,595 (32 percent) for water supply. Up to December 2008, there were 23,109 constructions in total. If every household had only implemented one construction, it would mean that 18 percent of the total number of households in the four rural districts has taken a loan. However, as many households took a loan for both water supply and sanitation, it can be assumed that the number of households that benefited from the programme is lower … Hence, the real number lies between 12 and 18 percent. (Reis/Mollinga 2009: 12)

Originally, the programme ran into a lack of demand from its intended beneficiaries, as they did not recognise the benefits, but some households began to emulate the initiative of first movers. Local perceptions of modernity and progress played an important role in this outcome. In practice, the programme managed to increase rural sanitation access somewhat, though only the most expensive (160+ euros) type of latrine, which included a septic tank, was constructed. Cheaper options were not perceived as an improvement over traditional systems, specifically the widespread “fish pond” toilet, which ultimately pollutes common waterways. Reis and Mollinga (2009: 13) found that

[ tilthe factor “modernity” is a major incentive for rural households regarding the construction of a new latrine … Having a septic tank latrine plays the role of a status symbol, which a simple latrine model cannot fulfil. This is also illustrated by the term “beautiful latrine”, which was often used by interviewees to describe their new toilets, and by the pride with which households presented them. ]
The question of long-term sustainability of these toilets was, however, neglected as it was found that households and officials were oblivious or indifferent to the fact that septic tanks would have to be emptied within 10 to 20 years. At present, this was technically impossible except by hand due to the narrow roads in the area. It also appeared that the exclusive implementation of the more expensive models excluded the poorer households, so that the project did not achieve its intended broad impact. Moreover, poorer households were precluded from access to credit through group exclusion and self-exclusion, and were dissuaded by technological barriers. It is questionable, therefore, whether the households that did engage in improvements would be able to internalise the gains, since the environment remained polluted.

The largest share of the [project] budget is used by households which construct septic tank latrines. These households usually have access to tap or well water, because the latrine requires “plenty of water for flushing” (according to MoH decision 08/2005). It was not observed that any of these households did not have access to tap or well water. This also indicates that the programme mainly reaches medium-income and better-off households, for which clean water supply is mostly not problematic. (Reis/Mollinga: 18)

On the water side, Reis and Mollinga were presented with a mystery. Despite the project’s aim to also increase piped water access through microfinance loans, no new water connections were found. A few wells had in fact been dug, despite a stipulation in the project prohibiting this in order to prevent further groundwater depletion. An effective and relatively affordable household water filtration system for making contaminated water safe to drink, which cost about 100 euros and had been locally developed and was intended for roll-out through the project, was not implemented. Local officials and project authorities claimed that the lop-sided emphasis on sanitation resulted from greater demand for latrines and that access to clean water was already widespread. However, Reis and Mollinga found this not to be the case. Instead, they discovered that the redirection of water loans toward sanitation corresponded to the business interests of local construction firms that arose from the liberalisation of the Vietnamese economy, or, as Reis explains it, the “hybrid” politico-economic structures of the region.

Considering the ongoing hybridisation of bureaucracy and private business in water supply in Can Tho … it is clear that developing household water treatment models is currently beyond the interest of responsible agencies because it does not offer a business opportunity. Government officials are currently doing their business in the construction of piped schemes and are therefore not keen on implementing policies that take a different approach to rural water supply. (Reis 2011: 200)

Key figures in the water-supply companies were also owners of the companies constructing centralised purification systems. Reis and Mollinga (2009: 17) note that “it is to be seen in this context that the interest of government agencies, as well as officials as private persons, are highly interwoven with the business interest of private enterprises that are contracted to carry out public tasks.”
Andhra Pradesh, India

The findings presented below are based on my field research on a project in Andhra Pradesh in southern India.\(^{15}\) This research – which consisted of participant observation over the course of several months and a total of 29 semi-structured interviews with SHG members, NGO workers, municipal officials and academic experts – was conducted during the spring and summer of 2010, immediately before the advent of the microfinance crisis that began in September. The work presented here therefore only roughly connects with recent events, but the findings should be considered against the background of the over-indebtedness and predatory lending patterns which have since become known. In hindsight, for instance, the fact that several women reported having multiple loans from MFIs and moneylenders should have been explored more deeply. This would have helped to bring into clearer focus the relationships between increasing microfinance presence and rising debt levels, and the potential impact on water and sanitation expansion via microfinance. However, at the time of the research, the events a few months later could hardly have been foreseen.

The project I examined began in 2009 as a pilot project in three sites in Andhra Pradesh: two medium-sized rural municipalities with a population of between 130,000 and 200,000 (towns by local standards), and one large municipality with a population of around 900,000\(^{16}\) on the outskirts of Hyderabad, the state capital, which was recently amalgamated into the Greater Hyderabad Municipal Corporation. Groundwater in Andhra Pradesh is rapidly depleting; Hyderabad, for instance, has had to enhance its own supply with a massive 120-kilometre long inter-basin transfer scheme with a lift of 400 metres. One of the two smaller towns lies in a coastal floodplain where groundwater is (naturally) contaminated with fluoride, which causes bone and joint disease (expert interview, 25 May 2010), and the other lies in the driest region of southern India, which has been highly rain-deficient in recent years. Especially in the smaller towns, people regularly suffer from throat infections, jaundice and diarrhoea as a result of drinking tap water (interview with NGO worker, 17 February 2010). In Hyderabad fourteen people died in 2009 from an E-coli infection spread through the municipal water supply as a result of a local contamination (Times of India 2010).

The project targeted poorer, under-serviced areas within the three municipalities, which usually had some standpost facilities (public neighbourhood taps), but few household water connections if any and no sanitation systems. All three municipalities have experienced rapid growth in recent decades; the estimated population of the Hyderabad

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\(^{15}\) The names and identity markers of the organisations and people involved have been left out since some of the involved parties prefer to remain anonymous. I still wish to thank those who granted the time and attention necessary for making this critical appraisal possible, which echoes some of the concerns voiced by the involved actors.

\(^{16}\) These figures were given unofficially by municipal officials in the three towns as their best estimates. Due to India’s rapid urbanisation and population growth, there is considerable uncertainty about the population changes since the last official census in 2001.
suburb had even doubled over the previous ten years. The municipalities were still trying to catch up with the water and sanitation needs projected for the 1980s and 1990s, sometimes operating with infrastructure constructed in the post-independence decades for less than one third of the current population (interview with Municipal Commissioner, 2 July 2010; interview with Deputy Executive Engineer, 11 June 2010). They do not manage to supply poor areas sufficiently with water; many areas only receive water for half an hour or one hour every other day, or even less. Some neighbourhoods are only supplied by water tankers which come daily or every other day.

The project consisted of three distinct elements: (1) household water tap connections; (2) household sanitary latrines; (3) pay-per-can drinking water from reverse osmosis (RO) purification plants. Funding came through a grant from a large American foundation, which gave a subsidy of about 80 euros to cover 50 percent of the estimated construction cost of each latrine or water connection. The other 50 percent was expected to come from sundry microfinance providers via loans, which the households themselves would take out either directly or through SHGs or other groups. The project was furthermore granted some infrastructural and financial support by the Andra Pradesh state government’s urban development programme, MEPMA.17 Municipalities were involved as the providers of both water and sanitation infrastructure and social services and organisational support through their social workers.

The subsidies were disbursed by a regional NGO working with women’s Self-Help Groups. SHG membership was mandatory for a household to be eligible for the subsidy, and SHG Federations, consisting of the elected representatives from between 20 and 40 SHGs, acted as financial intermediaries and organisational nexuses for the project. SHG federations facilitated the project through their support of the SHGs’ traditional function of enabling bank linkages (credit access) for households, and through identifying beneficiaries for the subsidy among their members. Officially, the role of the NGO was “capacity-building” – support for the SHG federations in organising the project themselves – though in practice its employees’ functioned as project co-ordinators, training providers, financial auditors and, whenever considered necessary, discipliners. In around 25 percent of the SHG Federation meetings I attended, the (always male) NGO workers publicly disciplined the (all-female) SHG representatives for various financial or organisational laxities and oversights, and sometimes withheld funds as a form of pressure. On the whole, this complex project set-up appeared to represent a certain amount of social re-embedding of the microfinance idea within the existing local grassroots organisational structures and state/municipal administration systems, though the grant finance and access to loans remained central.

At the time of my field research, the project was one year into its rollout, and far behind schedule. This was most notable in the case of the RO drinking water plants, which turned out to be popular but were politically contested. The RO plants received 50 percent of their funding from the American foundation and 50 percent from the state

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17 MEPMA = Mission for the Elimination of Poverty in Urban Areas.
development agency, MEPMA. Two of them had already been opened to the public and had a growing clientele of several hundred households represented by women who came regularly to purchase 12-litre cans of drinking water for approximately 0.04 euros; a third were just beginning operations. Some customers had their cans home-delivered via auto rickshaw for an extra fee. The RO plants were rather like communal enterprises, offering employment for several SHG members as attendants, who earned a monthly wage between 32 and 48 euros under the direct supervision of the SHG Federation. Regrettably however, the majority of the planned RO plant constructions was stalled for varied and sometimes unclear reasons. Of the 8 communal RO plants planned in the first round, only 3 had been completed; the foundations for 2 others existed but were (at least temporarily) abandoned, while sites for yet others had been designated but construction had not begun. Two had very clearly been stopped due to local political disputes. Representatives of “other backward classes” (OBCs)\(^\text{18}\), who had not been included in the project’s decision-making processes, had blocked the construction of a plant.\(^\text{19}\) Evidently, democratically elected local leaders and strongmen had been bypassed and saw their reputation as facilitators for infrastructure investments and social services threatened. In another case, a major political party was blocking the construction of an RO plant in one of “its” neighbourhoods while a rival party ruled the municipality. It is important to note that although the RO plants were designated as part of the larger project they had in fact no microfinance element apart from being operated by SHG federations whose original purpose was to facilitate microfinance. For the purposes of this paper, I therefore note that these RO plants provided a valued service to the community, but were not involved in any microfinancing.

Progress on water tap connections and latrine constructions was also hampered. Averages for the three sites show that only 44 percent of the targeted households who were deemed eligible came forward for the project’s latrine subsidy, and 33 percent for the water tap subsidy. As the project’s director explained to me, the improvements were premised on people’s self-identification of their need.

So we asked the community: if you need it, and you also recognise the importance, then you pay 50 percent, it is an asset for you. Otherwise you can also build fully through your funds. So now, this is the opportunity to build your own asset at 50 percent, the remaining 50 percent come from other sources. (Interview with NGO project manager, 16 February 2010)

\(^{18}\) “Other Backward Classes” is a term used officially in India to refer collectively to castes that are considered to be socially and economically disadvantaged, but are distinguished from the “Scheduled Castes” (Dalits or “Untouchables”) or “Scheduled Tribes”. Both the Scheduled Castes and Tribes and the OBCs are entitled to “reservations” in government jobs and education, with each group being allotted different quotas. While the category OBC is fluid and subject to regular re-definition by the government, OBCs represent a sizeable part of India’s population, between 33 and 52 percent depending on the definition used.

\(^{19}\) As one NGO worker explained to me: “They prefer being famous for preventing something good than not to be having been involved in it” (interview, 24 June 2010).
Evidently a majority of households had not recognised the opportunity. However, even more disappointingly, one year after demand appraisal, merely 11.7 percent of the 2,925 households that had registered and were approved for water connections, and 9.7 percent of the registered and approved 2,688 sanitary facilities had been “provided”. Note here that “provision” refers not to delivery of a complete product, but to full disbursement of the 50 percent subsidy; the household must complete a certain part of the construction before one half of the subsidy is disbursed and finish the sanitary works and the roof before the other half is disbursed.

During site visits, only a relatively small number of constructions were actively in progress (given the large number of total constructions approved), and some completed toilets were not being used; households were as yet “not comfortable” using them. It was explained (mystifyingly so) that the latrines were not perceived as “completed” before a plaque with the name of the NGO and the funders had been attached. A number of facilities were being used as storage space. Strikingly, many toilets had been integrated into new extensions or additions to the house – the vast majority of at pukka (proper, permanent) houses – which certainly did not diminish their use as sanitary facilities but indicated additional motives other than the sanitary improvement; often, the new toilets were found under newly-constructed staircases leading to the building’s roof in anticipation of a second floor.

It was possible to identify several reasons for the slow progress and low uptake at the level of individual households. They included the intended beneficiaries’ limited financial capacities to undertake investments, which had been reported by SHG leaders (even with a subsidy and a loan). Occasionally, a sheer lack of space on the household’s plot was cited, or space was restricted due to vastu shastra20 principles. Additionally, in many slums there was a lack of secure land use rights, since land was formally squatted. The tenants of rented dwellings (both in formal and informal settlements), on the other hand, naturally declined to invest in their landlord’s house, while landlords were not targeted by the programme. Neither landlords nor tenants could be certain of being able to internalise and capitalise the benefits.

The targeted households were expected to obtain loans for their (estimated) 50 percent cost contribution, and it was found that most had no trouble accessing credit. Almost all interviewees reported having microfinance loans; many had several. Many also reported having a range of “microfinance” loans of which some, upon closer interviewing, were revealed to be “unofficial microfinance” loans or loans from “small banks”, which turned out to be a euphemism for informal moneylending. Given this existing access to various

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20 Many households adhered to this traditional Hindu system of design and space usage. For instance, it was indicated that according to vastu shastra water should not be placed in a certain corner of a plot.
sources of finance it is clear that few households would have undertaken water or sanitation construction without the subsidy; loans were available before, but were not used for water or sanitation, which were not seen as priorities for self-financing via loans.

Several structural constraints to expanding household water and sanitation access were found at a higher level than households’ access to finance. In this sense, a possible non-completion of the project’s interventions should not be “blamed” on any of the project’s implementing agencies, but on the basic premise that household access to credit was the key constraint. Instead of the demand for water taps depending on credit (which was available), it depended crucially on the capacity of the municipal water board to deliver enough water, which it usually could not. NGO workers regularly and positively interacted with municipal employees, who were open to their suggestions, but were constrained in their capacities due to decrepit infrastructure and a lack of municipal financial resources. These underlying problems could not be tackled by small loans; at best they were moderated for those who happened to be in reach of existing supply systems with sufficient delivery, or lived in a few neighbourhoods ordained for network expansion. In areas where taps were being provided, they were demanded only by 38 percent of households of whom 17 percent had completed their part of the construction within in one year (the percentage actually receiving water service after the completion of the construction could not be determined). Overall, many households apparently saw no benefit in having to pay approximately 1.60 euros per month in fees for having water supplied to the house at the same irregular intervals and in the insufficient quantities supplied to public standposts out on the street; they could not internalise sufficient benefit. Most of those who did take the opportunity were in fact building storage tanks on their property at additional cost for collecting excess water from their tap whenever it was delivered. The costs for the storage tanks had not been considered in the original cost estimates, so this measure was reserved for the relatively more affluent.

In one town (in the dry region), no tap connections were provided at all. This town was constructing a large new storage reservoir and no new taps would be connected until its completion. A similar situation was noted in Hyderabad, where upmarket neighbourhoods benefited from sufficient and reliable water provision and soft drink bottling plants flourished on the outskirts while entire peripheral neighbourhoods with several thousand of residents each had no piped supply at all. These issues are symptomatic of a long-term public underinvestment in water and sanitation infrastructure and capacities, exacerbated by liberalisation, as well as an inequitable distribution of the available resources (interview with former town planner, 19 February 2010).

21 A water tanker arrived while I was touring a neighbourhood on the outskirts of Hyderabad. Women came running from all directions with containers to secure their share of the water as it was unclear when the next tanker would come.
Related issues were found regarding sanitation. Both smaller towns had no sewer systems, so any sewage had to be disposed of in private septic tanks. Municipal officials considered a sewage system an important and necessary improvement for their town but claimed it was far beyond their financial means (multiple interviews). In greater Hyderabad, because the sewer system did not extend to most poor neighbourhoods, septic tanks would usually be constructed there, too, although in a few of the targeted neighbourhoods toilets were to be connected to existing mains. As in the Vietnam case, no arrangements had been made in the project for the subsequent emptying of the septic tanks. NGO workers did not know how long it would take until the tanks required emptying, nor how it would be organised when the time came. “They [the beneficiaries] will take care of it then and maybe they will take a loan” (interview with NGO officer, 20 June 2010).

It was interesting to note the actual motivations of the households who applied for the sanitation subsidy, which often appeared at odds with the programme’s theory that households would recognise sanitation upgrades as an investment in health. Rather than pointing to disease risk (which was rarely mentioned during interviews), the SHG representatives I interviewed repeatedly named three concerns about the present sanitary conditions. Two were directly linked to local social codes that only allow women to defecate openly at night rather than during the day: a fear of wild animals (especially snakes) and a fear of rape (circumscribed as “drunken men” or “dangerous fellows”). The third was related to increasing pressures of urbanisation, especially in Hyderabad suburbs, where open areas and brushland (“jungle”), which were usually used for defecation, were rapidly being developed. Given these immediate pressures, it is surprising that only 44 percent of women registered to construct a latrine; especially since sharing a facility is uncommon (interview with municipal official, 17 February 2010). Overall, it was obvious that mainly the relatively better-off households (those with “pukka” houses) undertook the investment, though a small number of poorer houses (“kutcha” houses) also had latrines under construction. When asked about the project’s equity, higher-ranking women in the SHG federations, who were charged with educating SHG members about the health benefits of sanitary latrines and organising the project’s implementation, repeatedly expressed their concern that the poorer members were excluded due to their inability to afford to build a toilet. NGO employees also made it clear that they did not expect to be able to reach very poor households through the project, and regretted this.

Lessons from two very different cases

The empirical evidence from the cases in Vietnam and India calls into question a number of presumptions made by advocates of microfinance for water and sanitation. While both projects showed some partial successes in generating new household water and sanitation access (which should by no means be discounted), both fell short of
their respective aims. The range of commonalities of outcomes between the two cases is striking, particularly given the wide differences in setting and design. However, some differences between the outcomes of the two projects are also worth noting, as can be seen with reference to Table 2.

Table 2  Outcomes of the Vietnamese and Indian cases

<table>
<thead>
<tr>
<th>Differences</th>
<th>Vietnam (Can Tho)</th>
<th>India (Andhra Pradesh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of constructions</td>
<td>23,109</td>
<td>5,613</td>
</tr>
<tr>
<td>Problems with loan access</td>
<td>only for water purification</td>
<td>no</td>
</tr>
<tr>
<td>Land rights insecurity</td>
<td>not mentioned</td>
<td>yes, some</td>
</tr>
</tbody>
</table>

Commonalities

| Political interference       | drinking water programmes resisted by local political elites |
| Water from public provider   | undersupply for households (pipes in Vietnam, water in India) |
| Septic tanks                 | all or most facilities; long-term sustainability not considered |
| Sanitation motivation        | health benefits not key motivator; status, safety, privacy and modernity are motivators |
| Construction costs           | higher than projected for water and sanitation |
| Equity                       | poorer households mostly excluded |

The project under study in the Vietnamese case targeted rural areas using money from state donors which was distributed by a state development bank to provincial and local administrative bodies in the context of a statist political-economic setting. The Indian case targeted urban and peri-urban areas using a combination of money from the private sector and foreign philanthropic donors which was distributed to an NGO and directly to women’s credit Self-Help Groups. It operated in the relatively market-liberal setting of post-Structural Adjustment India. In Can Tho, the project targeted only household water and sanitation upgrades (including household purification systems for safe drinking water), while in Andhra Pradesh the project additionally aimed at setting up communal pay-per-can drinking water purification facilities. Both settings shared a tropical climate with large seasonal variations in rainfall, and in both cases the groundwater was insufficient and/or showed falling levels, and many groundwater sources were contaminated. In the Vietnamese case, population growth was mentioned as a factor while urbanisation was not, while in Andhra Pradesh both urbanisation and population growth clearly exerted significant pressures on households’ water and sanitation practices.22

A few differences in outcome are apparent. The projects achieved a somewhat different scale, though not vastly dissimilar at 23,109 versus 5,613 total constructions implemented (at time of research). Access to loan finance was constrained in Can Tho with respect to water purification systems, while problems with loan access were not found in Andhra Pradesh. Finally, insecurity of land use rights due to squatting or informality

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22 In secondary literature we can find that Vietnam’s population grew annually by 1.4 percent (Haub/Huong 2003), while the Andhra population grew 13.86 percent over the decade from 1991 to 2001 (EPTRI 2003), indicating very similar population trends in both cases.
of settlement represented a problem for some households in Andhra Pradesh, due to mains access (which is largely non-existent in informal settlements) as well as the uncertainty of future tenure. This was not reported in the case of Can Tho.

Yet despite the large differences in project design, the two projects’ outcomes were remarkably similar. The fact that drinking water improvements ran into political interference from local elites in both cases – in the Vietnamese case because it went against elites’ economic interests, and in the Indian project because it ran against political interests and confronted caste identity issues – may be seen as the most surprising common outcome. It was not predicted from the framework in section 3 of this paper. The planned improvements in drinking water access were very differently structured in terms of technology and governance in both cases, yet access to drinking water remained a highly contentious and politically embedded issue in either case. A parallel finding linked to local administration is that the public water providers of both Can Tho and the Andhra towns faced capacity problems in reaching the poor, albeit in different ways. In Andhra Pradesh, the irregular supply times and the complete failure in one location to arrange any new network extensions were the most striking problems. In both Can Tho and Andhra Pradesh it was found that sewage networks were out of the question, so that septic tanks, which may be less sanitary than piped sewage disposal, had to be constructed for all (Can Tho) or most (Andhra Pradesh) sanitary facilities. In both cases, the long-term sustainability question of emptying the tanks had not been considered, which may lead to a profusion of unusable toilets in the future when the tanks become full.

A highly interesting sociological finding was that in neither case were the health benefits or any immediate financial gain reported as the key motivators for sanitation upgrading. They appear not to have been widely recognised, nor seen as internalisable or capitalisable. Instead, in Vietnam, the construction of a latrine was seen as a means to advance socially and/or gain status by upgrading one’s house; the latrines were proudly owned and referred to as “beautiful toilets”. In India, the key reported motivators were safety and privacy gains that had become crucial due to increasing pressures from urbanisation. The usefulness of the latrine subsidy for housing extensions was observed. These findings indicate that it will be difficult for projects to “sell” sanitation upgrades with arguments based on financially “rational” health calculations or labour time. They also question the overall accuracy of the financial “win-win” calculation made by microfinance advocates based on recognition, internalisation and capitalisation. The individual gains households could attain in both cases were largely non-financial and mediated through societal norms.

In both Can Tho and Andhra Pradesh the actual costs for construction were considerably higher than estimates from the project initiators (which had formed the basis for loan size and subsidy calculations), as reported by the households undertaking the constructions. Linked to this finding are concerns about the equity of the impact raised in

23 With the exception of a few neighbourhoods in the Hyderabad suburb.
both cases, since mainly better-off families undertook the necessary investments while poorer families were usually unable to afford them. These concerns, while not particularly surprising, should be taken very seriously, both normatively, since they undermine the case for microfinance funding for water and sanitation from a fairness point of view, and operationally in that we are likely to see diminished environmental and health impacts if only part of the community engages in improved sanitary practices.

5 Results and conclusions

This paper has theoretically and empirically examined projects using microfinance for expanding water and sanitation access in developing countries. In section 2, microfinance was introduced and critically examined against its political economy background of post-1970s neoliberal restructuring and the rise of the vision of fragmented entrepreneurial development. Section 3 contrasted a brief history of water and sanitation systems with the assumptions that underlie proposals for using microfinance as a means for expanding access to public goods and services. The underlying individualistic entrepreneurial approach based on an understanding of water and sanitation as private goods was problematised, and the collective action problems and socio-political choices inherent in the supply of goods such as water and sanitation were discussed. In section 4, empirical evidence from two case studies was presented: a field study conducted by Reis and Mollinga in Vietnam and my own fieldwork in India. Both cases operated in very different ways but showed surprisingly similar problematic outcomes. These are discussed below with a concluding note on further research and ways forward.

Pitfalls at the collective level: Politics, public capacity, values and equity

Returning to the three-part process suggested in section 3 as underlying the proposed “win-win” situation, it has not become completely clear from the case studies to what extent households are actually able to recognise, internalise and capitalise the benefits from water and sanitation. But there are at least some indications. Given that households were often motivated to construct sanitary facilities for non-health-related reasons in both cases, there appears to be a problem of recognition. However, due to other benefits recognised by households (such as status gain) and possibly aligned with health benefits, this might not represent a fundamental problem for the projects. The internalisation of benefits has proven to be trickier than assumed by microcredit’s proponents, as shown by the concern voiced in both cases about the exclusion of poorer households; benefits are not as great when the uptake is erratic due to water and sanitation being merit goods. Finally, the extent to which households could capitalise the benefits from improved water and sanitation remains unclear. While it might be possible, based on loan
repayment rates, to make conjectures at a later stage, to conclusively establish whether households actually gained financially from improved water and sanitation via microfinance would require a deeper impact study on health gains, medical savings, time gains and how they are spent, minus the total construction costs including interest.24

What has emerged more clearly from the findings in Vietnam and India is the larger political and economic hindrances faced by microfinance for water and sanitation. Much like section 3 has led us to expect, in both empirical cases collective action problems were found which the microfinance loans themselves could not address. The empirical evidence from these two cases underscores the public-goods problem and the importance of socio-political issues, both of which frustrate fragmented individual efforts. The public-goods problem is evident in the fact that network providers failed to meet the requirements necessary for water and sanitation to extend to most households via piped networks, even when those households had access to microloans and were willing to pay. The equity problem of some households being serviced while others remain excluded indicates that the costs of insufficient overall water and sanitation will continue to be borne by the general public. The political contentions and the social – not private – reasons for undertaking water and sanitation improvements make it clear that water and sanitation decisions are not dependent just on the private financial calculations on which microfinance-funded projects premise their actions, but upon political and social processes as well.

The problematic outcomes from the case studies discussed in the preceding pages can be attributed to four pitfalls: politics, public capacity, values, and equity. An understanding of these could provide important lessons for future water and sanitation projects.

- Politics: The finding that political elites interfered with drinking water projects to the extent of successfully blocking beneficial programme elements from progressing should caution both against placing hopes in these elites and attempting to bypass them. Infrastructure projects in India (as elsewhere) are invested with a high level of prestige for political figures, even relatively minor ones, who have the power to facilitate or block projects. Managing the political realm – making it work – is key for the success or failure of water projects.

- Public capacity: It was firmly established in India that public capacity was restricted due to a lack of funding; this was not so clear in Vietnam, though it was reported that the public supply network did not extend from the street to most homes, and that this was a significant problem. The incapacity of public utility providers to lay mains pipes for sanitation or to deliver sufficient water for tap connections strongly

24 An impact study was designed in cooperation with the author by a third party paid by the facilitating NGO when the project entered its implementation phase. However, the study was stalled until enough progress had been made on the ground for the results to portray the project as a success case, and its timing remains uncertain.
indicates that more macrofinance is needed for upgrading systems, rather than microfinance for extensions that place a greater burden on existing systems. The collective, “systems” level needs strengthening because water and sanitation are network goods.

- Values: The finding that social values, rather than financial calculations, influenced many households’ decisions to engage in construction, is the most complex lesson. It calls into question the simple financially-rational case for water sanitation improvements, a case which depends on the recognition, internalisation and capitalisation of benefits. Whether households are willing to take on microfinance debt actually depends on socially constructed valuation processes. Household practices are embedded in social norms and practices which must be understood for projects to be successful. Perhaps improved sanitation could be “marketed” on the basis of its modernity rather than health, though dishonest marketing instead of effective education may not be desirable. In any case, the safety and privacy gains sought by women in India should require no marketing, and it is dubious for microfinance projects speak of women’s empowerment while simultaneously making their safety from rapists dependent on their capacity to pay (or the willingness of their family members to pay).

- Equity: Related to the last point, the issue of equity raises grave doubts about the two projects discussed above. Not only were most of the poorer households excluded from the gains in financial and physical health promised by the projects (knowingly to the projects’ implementers in India). That in itself ought to be seen as an unacceptable outcome. But due to the externalities stemming from water and sanitation’s merit-goods characteristics the actual gains can also be assumed to be far smaller than those from inclusive provision. Microfinance therefore does not seem to be a fair and effective solution to the lack of water and sanitation.

On the whole, in both cases the provision of microfinance for water and sanitation addressed the symptoms rather than causes of the underprovision of water and sanitation to the poor. Because public bodies did not adequately deliver, households were left to fend for themselves or resort to second-best solutions. The microfinance projects could not address the problems of public bodies but instead promoted and extended self-help and second-best solutions. The one element evidently not missing in either case was household access to loan finance, since households did not report having difficulty accessing loans; only in Vietnam were loans politically constrained for drinking water.

While the use of microfinance loans paired with subsidies – either as an interest subsidy in Vietnam or as a direct cost contribution in India – apparently represented an opportunity for some households (usually the better-off) to improve their private water and sanitation situation, the projects ran into problems linked to larger collective failures. It is therefore questionable whether giving households better access to loans would actually do more to improve water and sanitation access than better financial support for water and sanitation providers specifically targeted at network expansion into poor
areas. Given the insight that resources with “basic” or “actual” public-goods characteristics will be underprovided unless collective action methods for their provision are found, the lack of safe water and sanitation in poor communities may be understood as resulting from too much market and too little public governance.

**General conclusion**

The theoretical arguments put forward in section 3 of this paper focused on the economic aspects of the goods “water” and “sanitation”. Although the case studies presented in section 4 produced evidence for the collective action problems predicted by the analytical framework, they also uncovered political disputes that had not been predicted. From a political viewpoint, it is of concern that local political institutions – which in India are democratic, usually not only in name – were bypassed and alienated rather than strengthened during the course of the project. While SHGs and their federations apparently can act as relatively viable institutions for the governance of social projects, it is important to prevent an inefficient and rivalrous process of parallel institution-building which would alienate existing local political institutions. If, for instance, it were somehow empirically determined that SHG federations are truly more dedicated to fulfilling the needs of the poor, they should be strengthened in a way that does not bring them into destructive rivalry with local democracy, a contest the SHGs are likely to lose. More research will be needed to deepen understanding of the interactions between microfinance projects and their institutional environment, and to determine whether the cases from India and Vietnam are either representative or outliers in this respect.

The values held by people on the ground emerged as a central thread in both case studies, with some people making the “right” choice to take out loans for sanitation upgrades, but often for the “wrong” reasons. While local politics and social values clearly transcend the individual level (at which microfinance projects aim), they also do not fit neatly with the relatively economic problematisation of the public-goods issue in this paper. Social values pertaining to water and sanitary practices would have to be investigated in their own right. Furthermore, given the transnational nature of microfinance and the transnational funding arrangements present in both projects, more attention should be paid in future to the workings of the cross-border financial and ideational linkages from which divergences can result between the original aims of projects and the actual outcomes.

Many of the problems discussed here can be expected to extend beyond water and sanitation. It is reasonable to assume that economies of scale, externalities, social values and political embeddedness are also important in other public goods such as education, irrigation, or electricity. It can then be predicted that the problematic outcomes discussed in this paper would be corroborated in other projects based on microfinancing. Nevertheless, research on such projects would clearly deepen an understanding of the issues and might turn up surprising results.
This paper has deliberately left aside the normative implications of requiring the poor to pay for access to water and sanitation, or indeed for any public goods. But that question is still a crucial one to ask: is it actually right to make the poor pay for public goods via microfinance? Self-help for the poor, while perhaps well-meant, could be seen as a cynical proposition given the capacities of the better-off in India, Vietnam and elsewhere to access decent services. Shifting the governance of vital goods from the public realm into the sphere of private interest (and capital markets in the case of microfinance) follows a cost-recovery paradigm which can be expected to exacerbate already existing inequalities in poor countries. Making microfinance loans a determinant for access leads to a micro-privatisation of public goods which then transfers the problem from the political level (where it might be remedied in a socially just way) to the private level, where one’s capacity to pay is the main determinant. It should not be forgotten that the loan costs of microfinance – which even in India, a low-interest market, can exceed 60 percent per annum (Shridhar 2010) – increase the price for water and sanitation improvements for the poor by the factor of interest. In this way, the concept of self-help via microfinance makes the poor pay even more than they would otherwise have to.

Finally, it is one thing to point to problems at the collective level, but it is another to seek solutions to these problems. If the public sector in rich countries has served citizens well, why should it not be strengthened in poor countries, too, instead of being displaced by microfinance-funded self-help? This is not only an issue of whether the microfinance approach works, which this paper questions, but also whether microfinance is fair and just even when it does work. The internationally codified Human Right to Water, which was established in 2002, is meant to be unconditional, and cost recovery-based approaches would arguably violate it. Progressive efforts at ensuring universal access to water and sanitation as well as other goods recognised in international treaties should advocate such unconditional formulations and seek to help democratic institutions fulfil these rights in a just way. Experiments in direct democratic governance of public utilities such as those in Porto Alegre (Brazil) and Kerala (India) have achieved remarkable and practically unparalleled results in recent years (Fung/Olin Wright 2003; Baiocchi 2005; Gret/Sintomer 2005).

The purported microfinance solution to water and sanitation hinges on non-democratic governance by private financial institutions and philanthropists and is premised on cost recovery from the poor. As Rosemann (2005) has calculated, the Millennium Development Goal of water and sanitation is easily attainable. Halving the number of people without access to water and sanitation in sub-Saharan Africa, for instance, could be done with a grant of a mere 4.80 US dollars per year from every person in the fifteen countries of Western Europe, that is, without any “self-help” contributions from the poor. Trying to make the poor themselves pay for water and sanitation, with or without microfinance, is unnecessary.
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