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Water Supply or 'Beautiful Latrines'? Microcredit for Rural Water Supply and Sanitation in the Mekong Delta, Vietnam

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Around half of the Mekong Delta's rural population lacks year-round access to clean water. In combination with inadequate hygiene and poor sanitation this creates a high risk of diseases. Microcredit schemes are a popular element in addressing such problems on the global policy level. The present paper analyses the contradictory results of such a microcredit programme for rural water supply and sanitation in the context of the Mekong Delta, Vietnam, through a qualitative study primarily based on semi-structured interviews in rural communes of Can Tho City. We come to the conclusion that the programme has a positive effect regarding the safer disposal of human excreta as well as surface water quality, but a marginal impact on poverty reduction as it only reaches better-off households already having access to clean water. The paper shows how the outcome of rural water supply and sanitation policies are strongly influenced by the local ecological, technological, and social settings, in particular by stakeholders' interests. The authors challenge the assumption that water supply and sanitation should be integrated into the same policy in all circumstances.

Keywords: Water; Sanitation; Microcredit; Mekong Delta; Vietnam

Etwa die Hälfte der ländlichen Bevölkerung des Mekong-Deltas hat nicht das ganze Jahr über Zugang zu sauberem Wasser. Zusammen mit unzureichender Hygiene und mangelnder sanitärer Grundversorqung erhöht diese Situation das Krankheitsrisiko. Auf globaler Ebene sind Mikrokreditprogramme eine gefragte Strategie, um diese Probleme zu behandeln. Der vorliegende Artikel analysiert die widersprüchlichen Ergebnisse eines solchen Mikrokreditprogramms für ländliche Wasser- und sanitäre Grundversorqung im Mekong-Delta in Vietnam im Rahmen einer qualitativen Studie, die auf halbstrukturierten Interviews im Raum Can Tho City basiert. Die Studie kommt zu dem Schluss, dass das Programm eine positive Wirkung in Bezug auf die sichere Entsorgung von Fäkalien und die Qualität des Regenwassers hat, jedoch nur einen begrenzten Beitrag zur Armutsbekämpfung leisten kann, da hauptsächlich finanziell besser gestellte Haushalte erreicht werden, die bereits Zugang zu sauberem Wasser haben. Der Artikel zeigt, dass die Wirkung von ländlicher Wasser- und sanitärer Grundversorgung maßgeblich von lokalen ökologischen, technologischen und sozialen Verhältnissen beeinflusst wird, allen voran von den unterschiedlichen Interessensgruppen. Die AutorInnen stellen die Annahme in Frage, dass Wasser- und sanitäre Grundversorgung unter allen Umständen in die gleiche politische Strategie integriert sein sollten.

Schlagworte: Wasser; sanitäre Grundversorgung; Mikrokredit; Mekong-Delta; Vietnam

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Introduction³

Microfinance instruments in poverty alleviation programmes have classically been geared towards the provision of midget credits with which the borrowers are able to finance small-scale business activities and thereby improve their livelihoods. Recently, the approach has been transferred to other areas of development policy (Saywell & Fonseca, 2006). Due to the pressure to meet the Millennium Development Goals (MDGs) and the popularity of cost recovery policies, microcredit is now also applied in the Water Supply and Sanitation (WSS) sector (Mehta & Knapp, 2004; Saywell & Fonseca, 2006). For sanitation it is seen as a useful approach because the supply-driven strategy of building toilets with household subsidies often resulted in unused facilities (Mehta & Knapp, 2004, p. 10). The paradigm shift in global sanitation policy has been described as a shift from "financing sanitation facilities" to "funding sanitation promotion and leveraging resources" (Mehta & Knapp, 2004, p. 16).

As an element of its National Rural Water Supply and Sanitation Strategy (NRWSS)⁴, and with the support of an international donor consortium, the Vietnamese government approved a loan programme for Rural Water Supply and Sanitation (RWSS) in April 2004. This aims to "increase quickly the rate of rural households having access to clean water and hygienic constructions" (Vietnam Bank for Social Policies [VBSP], 2008). However, research on water and sanitation has pointed out that "policy debates and often generalised, globalised arguments that underpin them often remain disconnected from the everyday experiences of poor and marginalised women and men", while current approaches fail to address "the patterns of complexity and interaction between the social, technological, and ecological/hydrological dimensions of water and sanitation systems" (Mehta et al., 2007, p. 2).

This paper analyses the microcredit component of the Vietnamese government's RWSS policy. First, it aims to assess the programme's effectiveness in reaching its goals. In doing so, it contributes to the question if and in which way microfinance

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³ This paper is an edited version of an article first published as a Working Paper at the Center of Development Research, University of Bonn (Reis & Mollinga, 2009).

⁴ The NRWSS was approved by the Prime Minister in 2000. The main responsible agency for its implementation is the Ministry of Agriculture and Rural Development (MARD), including its sub-branches and departments. The national goal is to provide all rural people with sufficient clean water and hygienic latrines by 2020 (MoC & MARD, 2000, p. 11). NRWSS is supported by a consortium of international donors (Denmark, Australia, the Netherlands, and recently, the UK).

is a useful approach for solving the financing gap in RWSS. Second, the paper goes beyond mere policy evaluation by showing how the local outcome of RWSS policies is strongly connected to the socio-political dynamics in complex water supply and sanitation systems, particularly with the interests of involved stakeholders.⁵

Research was carried out during a one-year stay in Can Tho City⁶ in 2008/2009 as part of the BMBF⁷-funded interdisciplinary research project *Water-related Information System for the Sustainable Development of the Mekong Delta, Vietnam* (WISDOM). The paper draws on 28 semi-structured interviews with officials on four administrative levels (commune, district, province, and national government), staff of donor agencies as well as households in three rural communes of Can Tho City.⁸ Study communes were chosen based on selecting typical cases that represent a larger number of communes as well as geographical distribution. Interviews were conducted with the aid of interpreters and analysed by using qualitative data analysis software.

Water Supply and Sanitation in the Mekong Delta

The Vietnamese Mekong Delta is an area where water is naturally abundant. In spite of that, the population faces increasing problems with regards to domestic water supply. Because of the settlement pattern, which follows the Delta's dense network of rivers and canals, rural households almost exclusively used rain and river water for domestic purposes until recently. River water is usually filled into buckets, transported to the house and stored in jars. Since the 1980s, surface water has been polluted through the intensification of agriculture, the establishment of industrial parks, the rise in industrial fish production, and population growth. Therefore, it has become popular to drill private wells, which is, however, expensive due to groundwater depths of 60 to 100 metres and only affordable for relatively wealthy households. The government agency responsible for managing water supply in the rural areas, *Centre for Rural Water Supply and Environmental Sanitation* (CERWASS), exclusively focuses on the construction of

⁵ For general discussion on water management in the Mekong Delta, see Kakönen (2008), Miller (2003), and Molle (2005). For a discussion on the politics of donor policy in the Vietnamese water sector, see Molle & Hoanh (2007).

⁶ In spite of Can Tho's administrative status as city, many areas remain peri-urban or rural, with a large share of the population depending on agriculture for their livelihoods.

⁷ BMBF = German Ministry for Education and Research.

⁸ The communes are Thanh Quoi in Vinh Thanh district, Truong Long in Phong Dien district, and Truong Xuan in Co Do district.

small-scale piped water supply schemes which abstract groundwater. This approach has so far not been able to solve the problems the rural population faces. This is related, firstly, to the difficult economic situation of the piped water systems, which prohibits the comprehensive coverage of all areas with water supply stations and the connection of all households to the networks. Secondly, the use of groundwater is ecologically not sustainable due to the fast depletion of the resource (MONRE, 2009; Nuber et al., 2008).

Our assessment is that official government statistics significantly underestimate the percentage of rural households that lack year-round access to clean water (for a detailed discussion on the compilation of statistics, see Reis, 2012, pp. 134-142) Based on an evaluation of numerous interviews with local authorities, water supply station managers, and households, our estimate is that around 30 to 50 percent of the population lack year-round access to clean water in the rural areas of Can Tho City. The situation is especially problematic in areas without public water supply networks and in the dry season when rainwater is not available (Reis, 2012, pp. 56-59).

For sanitation, people traditionally use fishpond or river toilets. Only 26 percent of households are reported to have hygienic latrines in the Mekong Delta (Ministry of Health & United Nations Children's Fund, 2007). A fishpond toilet consists of two planks, installed above the fishpond that rural households very commonly have near the house, surrounded by a visual cover made of leaves, plastic sheets or other materials. People believe the excreta make the fish grow faster. The water of fishponds is regularly released into the river or canal for exchanging the water. According to authorities, about one third of the waste is eaten by the fish and two thirds are released into rivers and canals. If the household has no fishpond, the excreta are directly disposed into the river or canal. Current sanitation practices pose a health risk as excreta contaminate the water resource used for drinking and other domestic activities.

The question is whether the RWSS microcredit programme is a useful instrument for improving access to clean water and hygienic sanitation in the delta region. How is policy "digested" (Molle, 2005, p. 25) when it meets the complex socio-political, technological, and ecological local setting?

⁹ That piped water supply is economically not feasible in the study area is related to different factors. Most importantly, the diversity of water sources available in the rural areas of Can Tho implies that, unlike in many other areas of the world, piped water supply does not have a 'natural monopoly', as it is not an exclusive good but instead 'competes' with other water sources, in particular rainwater and private well water (cf. Spencer, 2005). Moreover, the administrative division of urban and rural water supply impedes subsidising the unprofitable rural areas with revenues from densely populated, profitable areas (for detailed discussion, see Reis [2012, pp. 90-101]).

The VBSP Microcredit Programme on RWSS

The *Vietnam Bank for Social Policies* (VBSP) was established in 2003 and is charged by the government with implementing microcredit programmes.¹⁰ The VBSP loan programmes are group-based lending schemes, which are usually operated through the Vietnamese mass organisations. Besides the Farmers Union (FU), Veterans Union (VU), and Youth Union (YU), microcredit programmes are most often administered by the Women's Union (WU).

In order to receive a microcredit in the RWSS programme, which is meant to go towards constructing water supply and sanitation facilities, a household has to join a local credit group that is managed by a Credit Group Leader. The credit group decides which households can take a loan, and the amount and terms of the loan (Cuong, 2008, p. 156). After the Commune People's Committee has approved the list of the demanding households, it is sent to the VBSP on district level. The VBSP approves the list and asks Credit Group Leaders to make the credit contracts. In order to make sure that the money is spent for the right purpose, local credit officers stated that they have made arrangements with construction companies. Local companies provide the construction material to the assigned households for three days without payment. During this time, 30 to 40 percent of the construction has to be completed. Then the Credit Group Leader and the staff from local health stations check the quality of the construction. If it complies with the standards, the credit officers of the local VBSP branch disburse the money.

The microcredit programme for RWSS started in 2004. Initially, it was run as a pilot project in ten provinces; from 2006 on it was implemented throughout the country (Government of Vietnam [GoV], 2004; Ministry of Agriculture and Rural Development [MARD] & Vietnam Bank for Social Policies [VBSP], 2005). Beneficiaries of the programme should be households that do not have water supply and sanitation constructions yet, or that have constructions that do not meet the national standards. According to the regulations, households can take a loan of maximum VND 8 million (ca. EUR 329), if they implement both a water supply and a sanitation con-

¹⁰ The former Vietnam Bank for the Poor under the Bank for Agriculture and Rural Development was closed in 2003 and the new VBSP was established, when the government decided to expand loan programmes for the poor (Cuong, 2008, p. 155). The VBSP's funds derive from legal capital, income surplus, savings, loans funds under the programmes for poverty reduction and other social policies, and official development assistance funds (An, 2004, p. 4).

struction, whereas the maximum for one construction is VND 4 million (ca. EUR 165). The loan period can be adapted to the debt paying ability of the household but may not exceed 60 months.

Together with the VBSP, the Ministry of Agriculture and Rural Development (MARD), including its departments and offices, is the main responsible agency for implementing the credit programme. The departments of MARD are also responsible for issuing feasible WSS models including the technical design and the estimated construction cost. On provincial level, CERWASS and the Centre for Preventive Health (CPH) are the two government agencies assigned to carry out the loan programme in collaboration with VBSP and the mass organisations.

Since the government established the VBSP as an institution that is supposed to carry out humanitarian programmes with a focus on assisting the poor, interest rates charged by the VBSP are very low and the loans subsidised (Lenhart, 2000, p. 6). For 2009, the interest rates were negative because they were lower than the inflation rate.11 Under commercial circumstances, the interest rate would be substantially higher. Some microfinance experts point out that subsidised interest rates undermine the viability and sustainability of the lending institution because they often affect repayment rates and breed "under the table payments" to credit officers (H. D. Seibel, personal communication, 15 July 2009; Seibel, 1992, p. 93). However, it has also been pointed out that most microfinance programmes rely on subsidies as "it remains far more costly to lend small amounts of money to many people than to lend large amounts to a few" (Morduch, 1999, p. 1609). Besides, Morduch has asked why microfinance should not continue to be subsidised "if money spent to support microfinance helps to meet social objectives in ways not possible through alternative programs" (Morduch, 1999, p. 1571). Does the RWSS microcredit programme meet such social objectives in Can Tho?

¹¹ At the beginning of the programme, the monthly interest rate was 0.65 percent, in 2008 it was increased to 0.9 percent, i.e. a yearly rate of 10.8 percent. Considering the high inflation rate of 24.4 percent in 2009, the real interest rate was minus 13.6 percent.

Microcredit in RWSS: The Politics of Policy in Can Tho City

Loans disbursed

At the time of the field research the programme was implemented in four rural districts in Can Tho. Up to May 2008, 68 percent of the constructions implemented within the programme were for sanitation and 32 percent for water supply. Based on official data, between 12 and 18 percent of all households in the rural communes had taken a loan before the end of 2008. National statistics indicate that the programme reached more and more households over time.¹² The total amount of money borrowed in Can Tho in 2008 was VND 61.130 billion (ca. EUR 2.5 million), with the average loan for one household lying between VND 4.4 million and 6.4 million (ca. EUR 181 to 264).¹³

Sanitation

The CPH regularly sends two staff out to the communes in order to inform local authorities about the hygienic latrine models. They hold a meeting, which they invite the People's Committee, members of mass organisations, hamlet leaders, and staff from local health stations to. At these meetings, the CPH staff also provide information about other water and hygiene related issues. It is the responsibility of local authorities to spread the information.

There are four latrine models that the Ministry of Health (MoH) classified as hygienic and can be constructed with the loan (MoH, 2005).

1. Double vault latrine: The latrine is operated without water ('dry option'). One vault is used for around six months until it is full (in a household with six persons), then it is covered and the second vault is used. After six months, the remains can be taken out and used as fertiliser. The liquid residues flow into

¹² While in 2006 84,192 households took a loan, in 2007 the number was already 158,207 and in 2008, 248,145 households (figures were obtained from the National VBSP office in Hanoi).

¹³ Calculated with data from VBSP Can Tho for the number of implemented constructions in 2008 (14,011), and the amount of money that was borrowed for these constructions (VND 61,130 million). The average loan would be VND 6.4 million if it was assumed that 32 percent that implemented a water supply construction are included in the 68 percent that constructed a hygienic latrine because they took a loan for both constructions. The average loan would be VND 4.4 million if it was assumed that every household took the loan only for one construction.

a separate tank and can be used to water trees immediately. This latrine is relatively cheap to construct with only ca. VND 1 million. However, the latrine is inconvenient to handle, as ash must be applied every time it is used, and the latrine has to be covered after use. Moreover, people in South Vietnam are reluctant to use human excreta as fertiliser. Hence, the double vault latrine is not considered a suitable model for the Mekong Delta by the CPH in Can Tho.

- 2. VIP latrine: A simple latrine type with a tank/hole in the ground; air flows out into the open through a pipe. When the tank is full, a new hole has to be dug. According to CPH in Can Tho, it is cheap but inconvenient because of the smell.
- 3. Pour flush water seal latrine: This latrine is recommended by the CPH in Can Tho because with a cost of only ca. VND 1 million it is cheap to construct. It has one tank with small holes, where bacteria in the underground decompose the organic substance. Liquids are disposed through the holes. After ca. five years the residues have to be dug out and put into another hole.¹⁴
- 4. Septic tank latrine: It is the type of latrine that is common in cities. It is operated with water ('wet option') and the excreta are decomposed in a large tank that is installed under the house. However, the residues cannot be fully decomposed and the tank has to be pumped out every few years (varying between 5 and 20 years, depending on the size of the tank and the number of people in the household). It is considered to be the safest and cleanest latrine, but it is also the most expensive one. According to the CPH, it can be constructed with the 4 million loan, but local people said that meanwhile (due to the high inflation rate) it is not enough and they have to add own money.

Only models number 3 and 4 are considered feasible by the Can Tho CPH and are introduced to the local authorities. However, data from the three study communes suggests that in practice, only the septic tank latrine is constructed with the loan. No other hygienic latrine type was observed, and officials from the VBSP as well as union representatives take it as a matter of course that 'hygienic latrine' means 'septic tank latrine'. This is illustrated by the fact that in all study communes and also at district level VBSP branches, respondents complain that 4 million is not enough to construct a latrine.

¹⁴ The effluent is still potentially dangerous as it always contains fresh faeces (i.e. there is a risk to ground water pollution in areas with high groundwater tables).

Statements from interviewees like the following suggest that there is a lack of cheap models for hygienic latrines that people consider better than the conventional fishpond or river toilets: "The health station also informed about another latrine type, which costs around VND 500,000 to 600,000. But the people want to have a sustainable construction and only invest once." (WU representative from Thanh Quoi commune, Vinh Thanh district, personal communication, 13 January 2009)¹⁵

Though informed about models such as the pour flush water seal latrine, people consider the difference between that latrine and a traditional toilet too small to spend money. The septic tank latrine is the only model for which there is demand.

The interviews showed that the 'modernity' factor is a major incentive for rural households regarding the construction of a new latrine. This observation is in line with the study conducted by Herbst et al. (2008). This study found that 77 percent of surveyed respondents were satisfied with their traditional sanitary situation, while in the course of in-depth interviews conducted later in the same study, it was found that the same people could still imagine having a 'modern' toilet. 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.

As latrine coverage has increased between 12 and 18 percent due to the RWSS microcredit programme, it can be assumed that the direct disposal of human excreta into the surface water has been reduced to the same degree. However, what remains unclear is the future disposal of the residues in septic tanks. In urban areas, the tanks are emptied on demand by trucks of the Can Tho Urban Public Works Company (UPWC). According to CPH, the same company is responsible for rural areas. However, cars or trucks cannot enter the narrow rural paths and the staff from UPWC does not seem to have a solution. Asked about the construction of latrines in rural areas and how they would be pumped out if the streets were this narrow, the Vice Office Manager of UPWC replied:

They will pump them out by hand. They have double-vault latrines, so it takes five to ten years until they are full. . . . [For the disposal of the waste,] maybe they will call the company, or they will use the waste as fertiliser. (Vice Office Manager of UPWC Can Tho, personal communication, 4 December 2008)

¹⁵ For a similar finding see Kar & Pasteur (2005).

It also occurred that rural households were not aware of the fact that the tanks have to be pumped out or do not consider this question relevant.

It is not necessary [to discharge the waste], the latrine cannot be full. It is a two vault septic tank latrine. If it is full, maybe it takes 15 or 20 years. (Representative of a household in Truong Xuan commune, Co Do district, personal communication, 21 October 2008)

Neither households nor authorities have paid attention to this issue so far.

Water supply

During field research on the RWSS loan programme, local authorities only presented latrines but no facilities for water supply. On the question what households do with the loan for water supply, the interviewees gave evasive responses. In some cases, it was stated that the money had been used for digging wells. However, it is no longer allowed to dig wells with the loan as wells are said to pollute groundwater resources. 16 In Vinh Thanh and Phong Dien districts, the staff from the VBSP stated that the loans were used for constructing water filters or containers for rainwater. However, in Thanh Quoi not a single such construction could be found constructed with a loan. In another commune of Phong Dien, one water filter construction at a household was presented but people said there were "only very few" such filters in the area. In Truong Xuan, WU representatives explained that the loan budget was only for sanitation. The FU had a budget for water supply in the beginning of the programme but since 2008, the budget was only for sanitation. "Previously, the VBSP gave a 1 million loan for connecting to the water supply station, but now there are only loans for latrines." (WU representative of Truong Xuan commune, Co Do district, personal communication, 23 October 2008). Asked for the reason, a FU representative again answered in an evasive manner:

The budget of the government is not enough, so they give priority to the poor households. . . . I do not know [why the government gives priority for latrines and not for water supply], but the decision is related to the area served by the water supply stations." (FU representative of Truong Xuan commune, Co Do district, personal communication, 21 October 2008)

¹⁶ Digging wells is not generally prohibited. It is very common that households that have the financial resources dig their own well. However, the VBSP loans cannot be used for it anymore.

When officials were asked directly which percentage of the loans was for water supply and which for sanitation, nearly all of them said it was mostly for sanitation. If not, they would say something like "It depends on the local areas' demands". One VBSP representative explained: "Around 90 percent are for sanitation. The rate is higher because the demand for beautiful and good latrines is very high." (Vice Director of VBSP district level, personal communication, 25 September 2008)

Some other reasons were also given for using loans mostly for latrines. "Most loans in the RWSS programme are for latrines because the budget is higher." (PC president, Truong Long commune, Phong Dien district, personal communication, 28 October 2008)

The households can supply water on their own, contain it in jars. But for sanitation, they do not have enough money. (Director, VBSP district level, personal communication 22 September 2008)

However, it was found that the main reason why RWSS loans are not used for water supply is that there are no models introduced by provincial authorities, like this representative from the FU stated:

No, they have no models. They only offer the loan for the ones that live in the station network area but do not access the station. (FU representative of Truong Xuan commune, Co Do district, personal communication, 10 March 2009)

Only after a long investigation it was revealed by a government official that CERWASS does not fulfil its responsibility to introduce suitable models for water supply to the local authorities: "Actually it is the responsibility of CERWASS, but in reality the VBSP introduced the systems to the local authorities." (Anonymous, personal communication, 5 March 2009)

VBSP staff attempted to source feasible models from local companies which they introduced in some communes, but "the technology is not very good, it cannot meet our expectations. . . . When constructing a filter system, the people research how to construct on their own, they were not informed much." (Anonymous, personal communication, 5 March 2009)

A large share of rural households relies on using polluted river or canal water for their daily activities, and it is financially and ecologically unlikely that all of these households can be connected to piped water supply schemes in the near future (Reis, 2012, pp. 90-101). Hence, household water treatment facilities may be the only way to increase the rate of households with access to clean water.

In An Giang province, the province north of Can Tho, a model for household water treatment was developed by a local consultant who was hired by the RWSS NTPII.¹⁷ The model could be feasible as it can be constructed with locally available materials and is easy to operate and maintain. According to the consultant, the filter delivers sufficient water for one household, and the CPH in An Giang qualified the water quality as good. The filter is made of sand, charcoal, and gravel, and is able to remove organic waste and even pesticides and other chemicals from the river water. The price for construction was estimated VND 2.25 million by a private company; hence it would be possible to finance the model with a VBSP loan. However, also in An Giang, CERWASS has not made progress in realising such household water treatment facilities as solutions to the water problem in rural areas. An interviewee with insider knowledge about CERWASS said the following about the agency.

Sometimes they know the idea is good, but they do not like it... They see that the filter is good, but they prefer the schemes... [because] the benefit is for them... The filter is a benefit for the people.... It is very sensitive [to say why CERWASS is not interested in introducing the household filter system], it is difficult to answer. (Anonymous, personal communication, 11 December 2008)

The reason why household water treatment models are beyond the interest of responsible agencies is related to the hybridisation of bureaucracy and private business, which has intensified since the economic liberalisation in 1986 (*doi moi*) (Evers & Benedikter, 2009, p. 18; Gainsborough, 2005a; 2005b; 2007; 2009). In the course of the economic liberalisation and privatisation in Vietnam, the old planned economy of state-owned enterprises was taken over by a "new form of state-interventionism" (Gainsborough, 2009, p. 258). The interests of government agencies as well as officials as private persons are highly interwoven with the business interests of private enterprises that are contracted to carry out public tasks. In his study about strategic groups in the water sector in Can Tho, Benedikter (personal communication, 20 February 2009) found that several cadres from CERWASS have invested private capital into a company that constructs water supply stations and sells water-purifying technology. An interviewee with close relations to the political leadership in Can Tho put it very directly:

¹⁷ An Giang is one of the nine pilot provinces for NTPII in Vietnam, which were selected in the beginning of the donor support and receive additional funding and consulting from international experts.

Nowadays, the people in high government positions all become very rich. . . . [At CERWASS] the director, vice director, all have own companies that implement the constructions. (Anonymous, personal communication, 30 September 2008)

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. Household water treatment systems are so far not considered a potential income source for CERWASS officials in Can Tho. As a result, there is a lack of action with regard to water supply in the RWSS microcredit programme, and local authorities and households are not informed about suitable water supply models that could be implemented with the loan.

There is also evidence that the available data on the distribution of loans for water supply and for sanitation within the microcredit programme is unreliable. According to the data obtained on provincial level, 7,963 sanitation constructions and 3,522 water supply constructions were implemented in Can Tho between January and May 2008. However, it was found in all three study communes that, against the regulations, more than VND 4 million were disbursed to households for implementing only one construction, i.e. a septic tank latrine. For example in Thanh Quoi commune, the interviewed households received VND 6 or even 8 million for constructing a latrine. Considering that the average loan in Vinh Thanh district was already VND 5.3 million in 2008 if it is assumed that all households implemented only one construction¹⁸, and that models for water supply constructions are unavailable, it is questionable whether loans declared for water supply were not in fact used for sanitation.

Summarising, the data suggest that the largest share of funds in the RWSS microcredit programme is spent for the construction of septic tank latrines, whereas the water supply component is mostly neglected.

Allocation of loans among rural households

Local mass organisations, especially the WU, are very actively promoting the RWSS microcredit programme, as shown by the high adoption of the loan programme.

^{18 2,336} constructions were implemented in Vinh Thanh with a budget of VND 12,345 million.

Many interviewees also stated that the demand for participation in the programme was very high. However, many people said that the funding from the VBSP was not sufficient to give a loan to all households on the demand list. Before the Credit Group Leader compiles the list of households, the VBSP informs the local authorities about the available budget, i.e. it is already known to the Credit Group Leader how many households can receive a loan in one period. Moreover, Credit Group Leaders stated that credit officers from the VBSP would only take households off the lists if they did not possess legal residence permits or identification documents. Dufhues et al. (2002, p. 10) also found that credit officers usually approve the lists that they receive from Commune People's Committees. Consequently, the decision about who has access to a microcredit loan is taken at the commune and hamlet level.

The first and most important mechanism to select the households that get to participate in the programme is the creditworthiness of a household. Credit groups and the commune People's Committee are highly responsible for the repayment of credit group members (Cuong, 2008, p. 156), and local authorities and mass organisations are careful in selecting the households, like a VBSP officer explained: "The authorities are afraid of giving money to the people because the unions are afraid that they will not pay the money back." (Director of VBSP, district level, personal communication, 16 September 2008)

Moreover, the officer explained that the local unions receive a certain percentage of the monthly interest rates as a service fee, which is calculated with a formula included in the contract between the unions and the VBSP. In the case that a household does not pay the money, they will lose the service fee.

A local WU manager stated that poor households are generally not taken into account when it comes to setting up a list of demanding households.

Only the nearly poor can become member of the Women's Union. Poor households¹⁹ cannot become members, because the VBSP is afraid that they cannot pay back the money. DOLISA²⁰ will take care of them. (WU representative, Truong Xuan commune, Co Do district, personal communication, 22 October 2008)

It remained unclear whether this was a regulation decided on by local WU groups, or

¹⁹ The official poverty line fixed by the Can Tho City People's Committee is VND 200,000 (ca. EUR 8.20) per person per month. Local authorities decide which households are given a poverty certificate (Reis, 2012, p. 82). In this context, however, it remains unclear what defines a "nearly poor" household.

²⁰ DOLISA = Department of Labour, Invalids and Social Affairs. Households classified as poor receive certain benefits from the government, such as reduction of school fees, or in the case of RWSS, free connection to piped water schemes. However, poor households are often not connected to water supply networks in practice (Reis, 2012, pp. 81-85).

whether the interviewee just referred to the common practice. In any case, it seems to be contradictory to the stated aim of the VBSP to be an institution that serves the poor. Cuong (2008) and Dufhues et al. (2002) also found that poor households in most cases lack access to the VBSP's credits. They are not only considered as a credit risk but are in addition excluded from the powerful social and political network that determines the access to information about available credit funds (2002, p. 10).

The selection process further considers whether the household had previously received a loan in another programme. Several Credit Group Leaders mentioned that this was a criterion for being considered for the RWSS programme, like this group leader in Thanh Quoi commune: "The other women [in the group] already got a loan for breeding, so I gave the loans to those that had not received a loan yet." (Local WU group leader of Thanh Quoi commune, Vinh Thanh district, personal communication, 13 January 2009)

Moreover, interviewees explained that households belonging to the lower income groups would give priority for a loan with which they could directly increase their income, such as a loan for raising animals.

The focus on septic tanks is another issue that plays an important role in determining which households are reached by the programme. As demonstrated earlier, the largest share of the budget is used by households that construct septic tank latrines. These households usually have access to tap or well water because the latrine requires a lot of water for flushing. None of these households lacked access to tap or well water. This indicates that the programme mainly reaches medium-income and better-off households, for which clean water supply is mostly not problematic.

Conclusion

The analysis has shown that the RWSS microcredit programme within the NTPII has a positive impact on the latrine coverage in Can Tho and thus contributes to the safer disposal of human excreta and improved water quality in rivers and canals. In this sense, the programme also has an indirect impact on poverty reduction as it improves the water sources of the poor. However, it is still unclear how the remaining waste in septic tanks will be disposed of when that issue becomes relevant in a few years. It has to be ensured

that – given the lack of possibilities for disposal – the waste is not dumped into rivers and canals.

Moreover, while increasing the latrine coverage is an important element of improving the water quality of surface water, it is only one of the causes of water pollution in the Mekong Delta. The disposal of large amounts of pesticides and artificial fertilisers, solid waste, residues from animal husbandry and fish farming, and untreated wastewater from industrial parks into rivers and canals are very complex problems that remain unsolved. In addition, the central government irrigation policy, focused on the construction of large-scale infrastructure, exacerbates the scarcity of clean water in the rural areas of Can Tho (Reis, 2012, pp. 50-52). Considering the number and intensity of other causes of water contamination, increasing the number of hygienic latrines can only have a limited impact on the improvement of domestic water sources. This suggests firstly that the outcome of RWSS policy is strongly interlinked with and dependent on other policies. For Can Tho, it is particularly essential to include urban wastewater and solid waste management into RWSS policy, if it is to have any success in improving surface water quality.

Besides the moderate impact on surface water quality, the programme has a marginal impact on poverty reduction as it reaches only better-off households that already have access to clean water. There are several reasons for this. First, there are no models for water supply that could be implemented with the loan, while it is the poor that are in need of such models. The present approach of constructing groundwater based piped schemes is not a sustainable way of ensuring access to clean water for the rural population (Reis, 2012, pp. 90-101). Microcredit for household water treatment systems carries the potential for achieving the goals of the NRWSS, but that potential has not been utilised in Can Tho so far. Secondly, there is also a lack of cheap latrine models acceptable to the local population, which do not require access to tap or well water and additional own funds, like the septic tank latrine does. Experience from other world regions shows that affordable and acceptable latrine designs are a key success factor in microfinance for sanitation (Saywell & Fonseca, 2006). It is therefore likely that the demand for loans within the present programme will come to an end as soon as all better-off households have been covered. The third reason lies in the exclusion of poor households from the microcredit scheme because they are not considered creditworthy and they do not have the social relations that determine the access to VBSP credits. This result stands in contrast to the idea of donors and the government to subsidise the loans because they are targeted to the poor, and also to the fact that poor water and sanitation is particularly problematic for the poor. A study carried out by the Australian Agency for International Development (AusAID) in 2004 found that in contrast to the past, when poverty was a mass phenomenon in Vietnam, it is now focussed on particular groups such as landless and ethnic minority groups. Those poor have become "harder to reach" (AusAID, 2004, p. 18).²¹ The present study has shown that this assessment is highly relevant for the RWSS microcredit programme, which has currently no mechanisms for pro-poor targeting and thus misses to reach those that lack access to safe water.

As pointed out by Mehta et al. (2007), local WSS systems are characterised by the interaction of complex environmental, technological, and social dimensions. The case of Can Tho has illustrated how locally specific water supply and sanitation systems affect the outcome of RWSS policies. Socio-political factors, in particular the construction interests of local political elites, play a key role in the adaptation of policies framed on the national and global level. The programme reaches its limit at the point where it requires procedural changes at CERWASS, which may interfere with or be unsuitable for officials' business interest. National policy provides models for hygienic latrines that can be implemented within the microcredit programme, but implies that provincial authorities develop models for water supply that are adapted to the local conditions. However, it is - at least until now - beyond the interest of bureaucratic elites to engage in finding smallscale solutions for water supply. Hence, only the sanitation part of the programme is implemented. The combination of water supply and sanitation into one programme thus leads to the canalisation of money and resources towards the wealthier rural population that already has access to clean water. As a result, the programme misses out the water supply needs of the poor. The present case supports the point made by Weber that while "microfinance was developed as an instrument to fight global inequality in practice it turns out often to exacerbate adverse social conditions" (2002, p. 132).

This paper's findings do not implicate that it is useless, or even counterproductive, to emphasise the importance of improved sanitation facilities for development. Especially as groundwater is not a sustainable option for water supply in Can Tho, it is in the long term essential to counter the pollution of surface waters with human excreta. The findings do, however, challenge the common trend in policy making that water supply

²¹ Moreover, WISDOM project research has found that landless people in the Mekong Delta face an increasing pressure on their livelihoods due to declining fish resources, on which they most often depend (Gerke & Ehlert, 2009).

and sanitation should under all circumstances be integrated into the same programme. Moving "the sanitation crisis to the top of the agenda" (United Nations Development Programme, 2005, p. 166) should not mean that the problem of insufficient emphasis on sanitation within RWSS policies is turned upside down. Many reports and donor staff argue that an increased focus on sanitation is necessary as it usually falls behind the planning for water supply. It has been shown that the implementation of sanitation policies, in particular if they are not clearly pro-poor²², can also be at the expense of improving the water supply of the poor.

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²² A counterexample is established by first experiences with the Community-Led Total Sanitation (CLTS) approach in North Vietnam, which has considerably improved poor households' sanitation and hygiene awareness (SNV, 2010).

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