



WASTEWATER MANAGEMENT IN PROVINCIAL TOWNS IN VIETNAM

Executive Summary
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EXECUTIVE SUMMARY

Context of the evaluation

In addition to creating the institutional framework, the key factor in achieving the ambitious global Sustainable Development Goals (SDGs) will be to finance the policies and infrastructure necessary to successfully implement the goals. The global debate on development policy thus emphasises the increasing importance of sources of finance other than bilateral financial cooperation (FC) to finance a robust infrastructure for achieving the SDGs: Increasing domestic revenue in the less developed countries of the South (rise to middle-income status) and alternative sources of finance reduce the dependence on and hence the relative importance of bilateral FC in financing extensive infrastructure measures.

However, the Monterrey Consensus of 2002 recognises that bilateral FC has a role complementary to financial flows from private sources and the capital of the partner countries themselves in order to support 'endogenous processes of accessing own sources of development financing' (Scholz und Wolff, 2010: 336). Thus bilateral FC can still be regarded as an important instrument to sustainably strengthen partner countries. The existence of these kinds of endogenous processes is vital for effective sustainability, however.

In the context of alternative sources of finance, the question is to what extent bilateral financing of large infrastructure programmes can actually still generate added value for the partner countries compared with these other sources. This would only appear to be the case if such programmes provide decisive additional benefits beyond the simple transfer of resources at preferential rates. In order to achieve this, infrastructure programmes financed as part of development cooperation (DC) must (more than ever) provide a coherent combination of financing and supplementary capacity development.

German DC has expertise consisting of FC and technical cooperation (TC) with relevant capacity in financing and capacity development, enabling it to generate additional value. For several years now, joint programme proposals, formerly known as cooperation projects, have been devised by FC and TC and the activities closely coordinated, at least in principle. German DC thus follows a different institutional path than many other bilateral donors, with this arrangement giving it great potential for generating additional value in the sustainable implementation of large-scale infrastructure projects – in theory at least. To what extent, then, is German DC, with its combined FC and TC, viable for the future in terms of organisation and processes?

German development cooperation's wastewater programme in Vietnam

The Wastewater Management programme (short title) is an extremely long-term and complex programme: Launched in 2004, implementation had already been under way for more than 12 years at the time of the evaluation. It is not exactly clear when the programme will be phased out, as individual measures were already delayed by 11 years in 2017 and the residual funds available might last until 2025 according to estimates by the German Federal Ministry for Economic Cooperation and Development (BMZ).

The programme was designed to improve wastewater management in nine provinces in Vietnam. Cooperation with the provinces Bac Ninh and Hai Duong (programme name North I), Nghe An (Vinh, Centre), and Can Tho and Soc Trang (South I) began under the contract in 2003. The southern province Tra Vinh was included in the programme in 2004 under the title South II. Pledges in the form of further locations were specified in more detail during the government consultations in 2009. In 2012, activities began to be extended to include the provinces Son La, Hoa Binh and Lang Son (North II).

The area of activity of financial cooperation involved the creation of drainage networks, including pumping stations and sewage treatment plants. As part of FC, a total of seven loans totalling 136 million euros were granted to Vietnam for the investment measures in this wastewater programme.

Technical cooperation as part of the programme covered four phases. It involved providing advice to the Ministry of Construction concerning reform of the wastewater and solid waste sector, to provincial governments on legal regulations and to the operators of sanitation plants in provincial towns on technical and business aspects of managing these facilities. InWEnt – Capacity Building International, Germany and the German Development Service (DED) were also involved in the programme for a period of time. The activities

at macro level were implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) itself, and at meso and micro level by a consulting firm.

Implementation of the FC measures of the wastewater programme was and still is plagued by huge delays compared with the original schedule – in some cases by 10 years or more.

Subject and objectives of the evaluation

The subject of the evaluation was firstly the interaction between BMZ, GIZ and KfW (Kreditanstalt für Wiederaufbau) in planning, steering and implementing the programme (including communication between the embassy/country division and the partners). Secondly, the evaluation studied the causes of the delays of several years that occurred in the implementation of measures along with stagnant disbursements and pledges – still large – that had not been implemented towards the end of the programme. The framework conditions in the partner country were a particular focus here.

The subject of the evaluation thus particularly included the structure and content of reports from the implementing organisations to BMZ and the economic cooperation officers in the embassy along with communication between the three stakeholders, especially in terms of the opportunities for political steering of complex projects by BMZ. This also included cooperation between country and sector divisions at BMZ.

The overall objective of the evaluation was to analyse the factors that were responsible for the delays in implementing the programme and – closely connected with that aim – to identify the processes and methods that are necessary for political steering of this kind of programme in view of these factors.

The objective of the evaluation was therefore initially to clarify which factors influenced and/or delayed implementation of the joint FC/TC wastewater programme as planned. The evaluation also sought to look at how the programme dealt with the delays and what measures were taken at political and implementation level to counter them. In doing so, it primarily examined the extent to which various types of general political and administrative conditions in the partner country had a negative impact on implementation of the programme.

Another goal of the evaluation was to identify mechanisms and methods (particularly in connection with communication) that enable BMZ to steer a programme of this complexity adequately and effectively at political level. With the involvement of several German DC institutions, nine Vietnamese provincial governments (with several departments each) and the central government in Hanoi with several ministries, this is a complex FC/TC infrastructure programme; it not only needs to take account of the framework conditions, but also requires communication and cooperation by the stakeholders that does justice to this complexity. Against this backdrop, BMZ, GIZ and KfW together are the main addressees of the results of this evaluation.

Methodology of the evaluation

The starting point of this evaluation were specific questions from BMZ about the reasons for the delays that occurred in implementing the wastewater programme and the steering options for a cooperation project of this complexity. These questions were largely exploratory in nature. The nature of these questions played a key role in determining the evaluation design and in wording both the overarching and the detailed evaluation questions.

Primarily designed as a summative process evaluation, the evaluation examined a single programme. A qualitative evaluation design was used in the form of content analyses of documents and interviews and the reconstruction of processes.

The key data sources for the evaluation were the extensive document collections of the various stakeholders (BMZ, GIZ, KfW, consulting firms, Vietnamese authorities) and the expertise of the experts involved in the course of the programme from the implementing organisations and consulting firms, the representatives of Vietnamese ministries and provincial governments, and BMZ staff members. A total of 41 individual and nine group interviews were conducted. In addition, a one-day workshop was held.

The main sources of information for the evaluation on the German side were economic cooperation officers from the outset of the programme, GIZ officers responsible for commissions, component managers at GFA

Consulting Group, directors of the GTZ (Gesellschaft für Technische Zusammenarbeit)/GIZ and KfW country offices, priority area coordinators, and development workers and consultants deployed.

On the Vietnamese side, group interviews were conducted in all nine of the provinces that benefit from the programme. The Vice Chairmen of the Provincial People's Committee or their deputies and senior representatives of the relevant departments² (primarily construction, finance, planning) and the directors of the contracted waste disposal companies took part in these interviews. Individual interviews were conducted with senior representatives in the Ministry of Finance, the Ministry of Construction, the Ministry of Planning and Investment and the Vietnam Water Supply and Sewerage Association. Finally, towards the end of the data collection phase, a one-day workshop was held in Hanoi at which representatives from the nine programme provinces (a total of 25 people) shared their experience of implementing the wastewater programme and identified what they believed to be the key problems and obstacles to implementation. Individual interviews were also conducted with bilateral donors (Danish International Development Agency [DANIDA], Japan International Cooperation Agency [JICA]) and development banks (Asian Development Bank [ADB], World Bank [WB]).

A local evaluator was involved in collecting data for the evaluation in Vietnam. The expert conducted four group interviews in provinces in collaboration with the team leader. She collected data on her own in two other provinces. Finally, she worked on the issue of results at regulatory level independently.

Factors influencing programme implementation

One of the core concerns of the evaluation was to study why delays of several years occurred and are still occurring in implementation of the wastewater programme. The evaluation therefore set out to analyse the factors that impeded progress in implementation. Each factor thus identified was then assessed in terms of its significance for programme implementation. Finally, the study of these factors led to an assessment of the extent to which options for intervening were available to the German side, i.e. whether the factors could be influenced.

The evaluation showed that, when analysing the factors responsible for the delays, a distinction needs to be made between those arising in Vietnam and those arising as a result of a combination of external requirements and national conditions.

In Vietnam, the factors that contributed to the delays in implementation of the wastewater programme were of differing degrees of relevance in terms of their general applicability in all nine provinces and in terms of the extent of the delays they caused.

Only two factors proved to be highly significant in all the provinces, namely the lengthy state approval processes and the structures in the construction sector. The third important factor was the repeated changes and modifications to planning particularly against the backdrop of dynamically developing provincial towns, but also technical issues and the availability of land, which played a major role in the delays.

The acquisition/provision of land was not a problem in all the provinces. In those areas where it was a factor, there were differences as to how quickly the problems were able to be solved depending on the local conditions. Increased costs were also not a significant factor in the delays throughout the provinces; instead, they were only relevant where the planned construction times had already long been exceeded due to other factors and/or an agreement was not able to be reached quickly enough in the negotiation processes between construction firms and clients. Finally, tendering processes were a cause of huge delays in some cases: If offers with forged documents, offers that are too expensive or no offers at all are submitted, implementation is considerably delayed due to the need to repeat the tenders.

On the whole, there was a complex picture of various factors that influenced implementation of the investment programme in Vietnam. It is highly doubtful whether this set of factors exists in this form in other countries too.

² These are the sector ministries at provincial level.

Implementation of a programme is not only influenced by factors in the partner country. Aspects connected with the application of international regulations or national rules and procedures stipulated by the bilateral donor that play a role in preparing and implementing a programme must also be taken into account.

In the case of FC loans for infrastructure programmes such as the one in Vietnam, international invitations to tender must be published. In the wastewater programme in Vietnam, this requirement had at least three consequences with a considerable impact on the schedule.

Depending on the subject and technical complexity, it takes between 12 and 24 months just for international engineering firms to draw up planning and tendering documents in line with international standards. The subsequent extensive appraisal and approval process by various provincial authorities, the tender deadline, examination of the offers (by KfW too) and the recommendation for order placement take up to 12 more months – but only if the tendering processes do not need to be repeated. However, that was the case in several provinces (up to three times). In Vietnam, the entire process lasted up to four years in some cases. Several more months pass before the order is actually placed and the construction work itself begins.

A second problematic area is the use of internationally standardised specimen contracts drawn up by the International Federation of Consulting Engineers (FIDIC) for the agreements between the provinces and the construction firms to be contracted. They are based on the Anglo-Saxon legal system, but are designed such that, as a result of very comprehensive and detailed contractual regulations, recourse to national legal regulations can if possible be avoided. Compounded by the lack of experience of the provinces in particular with this type of contract, but also of the many construction firms, this led to lengthy appraisal processes and hence to delays in the planned schedule.

Finally, the use of cost norms required by the Vietnamese side in invitations to tender and offers led to delays, as international consortium partners are not able to submit offers in line with these national cost norms and therefore submitted offers that were much higher than the estimated costs, which resulted in long appraisal procedures or new invitations to tender.

Communication between the programme officers at GIZ and KfW is made more difficult by the differing degrees of decentralisation in the two implementing organisations. While the GIZ officer responsible for the commission is based in Hanoi and thus always present, KfW programme officers are based in Frankfurt and only visit the project sites an average of twice a year. It is a matter of concern that there is little exchange or coordination between the experts seconded by the two implementing organisations (and in certain cases they are not even aware of each other). Even though there is no evidence that these communication structures have had directly negative impacts, it is nevertheless plausible to assume that this situation does not enhance the effectiveness of communication and coordination of programme implementation.

Extent to which the causes of the delays can be influenced

In view of the causes of the delays in implementing the wastewater programme presented here, the question arises as to which of these factors could have been influenced by which of the German stakeholders involved in order to accelerate programme implementation.

Overall, it can be said that BMZ can influence the main factors in the implementation delays to only a limited extent (state processes) or not at all (planning modifications, construction sector) using its key instruments of political steering (government consultations and government negotiations). And the few opportunities for exerting an impact at political level were apparently barely used.

Political and operational steering

The issue of political steering of development projects concerns, among other things, the repeatedly discussed aspect of distinguishing between political and operational steering. Where does political steering intervene in issues of operational implementation? When does operational steering enter the political sphere and hence reach its limits?

BMZ's key steering instrument in bilateral DC is political dialogue in government consultations and government negotiations. A key requirement for this kind of dialogue is proper, detailed and comprehensive reporting to BMZ by the implementing organisations. The decision-makers in political steering at BMZ also

have access to the DC field structure, in other words the economic cooperation officers in the German missions abroad. The economic cooperation officers are responsible for coordinating cooperation in the partner countries and for ongoing contact with their governments. They support DC programmes continually at political level or can be involved on behalf of BMZ/the German Foreign Office to make use of relevant political contacts.

In connection with the wastewater programme in Vietnam, it must be noted that the economic cooperation officers in the embassy in Hanoi have no longer been actively supporting the project since it was phased out in 2013 and have refrained from making any interventions. In government consultations and government negotiations, the implementation problems in the wastewater programme were not addressed as often and as thoroughly as could have been expected and would have been expedient in view of the considerable delays in implementation. The implementing organisations barely provided any detailed problem analyses in the run-up to government consultations and government negotiations, largely deemed the possibility of influencing risks to be small and provided very few recommendations for action to BMZ.

In the past, the differing degree of decentralisation of programme management functions at GIZ and KfW has detracted from the necessary flexibility in making changes to planning and adjustments in the approach. Implementation of the TC module depended heavily on progress in the FC module, despite the fact that there was explicitly said to be no such dependence during programme planning. The presence of a seconded priority area coordinator in the partner country for a limited period had a very positive influence on operational steering. However, it is questionable whether the FC and TC systems are in fact at all compatible in view of their different structures and processes or whether the TC measures ultimately always have to be adapted to progress in the FC-financed measures.

Imbalance between the FC and TC modules

Independence of the two modules from one another – albeit in a negative sense – was seen in the late stages of the wastewater programme in that, due to a decision taken by BMZ (phasing out of the sector), GIZ discontinued its module at the end of 2017 several years before programme implementation was completed, whereas FC activities will continue up to the beginning of the next decade until they have been fully implemented. This discrepancy in programme implementation is clearly due to the different implementation mechanisms in FC and TC. The wastewater programme in Vietnam therefore cannot be deemed to be a coherent, closely dovetailed German DC offer.

Sustainability

Generally speaking, the sustainability of the development programme is jeopardised in several respects. This is partly due to business management reasons, as full cost coverage for the operating and maintenance costs of the wastewater plants and even more so for replacement investments cannot be achieved in the foreseeable future.

Above all, however, the sustainability of the wastewater programme is jeopardised as a result of the TC module being terminated before the end of the FC module. Due to the delays in implementation of the FC module, GIZ's training and advisory services for the three sites in the North II programme can no longer be provided, as a result of which proper operation and maintenance of the sewer networks and technical equipment cannot be deemed to be guaranteed.

Finally, there is also reason to doubt that the selected Vietnam Water Supply and Sewerage Association can continue the training and advisory measures of the TC module adequately, as it does not have the human resources or specialist capacity to do so (or at least did not at the end of 2016). In addition, it uses a business model that is presumably not attractive for most of the provinces and operators of wastewater treatment plants.

Relevance

In view of the environmental situation in Vietnam in general, and specifically the largely absent wastewater treatment, a combined programme to build sewer networks and sewage treatment plants is in principle

highly relevant along with political, technical and business capacity development. However, the actual relevance of the FC module is hugely reduced by the fact that technical conditions such as the ubiquitous existence of septic tanks were not sufficiently taken into account when the plants were planned and the contribution they make to reducing environmental risks is thus relatively low.

Effectiveness

There are no grounds for objection in technical terms regarding the effectiveness of the sewer networks and sewage treatment plants that have been built, as the planned purification levels are very easily reached and inner-city flooding has decreased. The effectiveness of the TC module is reduced by the fact that the capacity development measures were only realised much later in some cases (depending on the FC module) and could not be completed in the three towns included in the programme at a later date.

Efficiency

The overall efficiency of the wastewater programme is clearly negative. In some places, implementation has taken three times as long as originally planned, leading to considerable additional costs in some cases. Some of the sewage treatment plants are too large, which means that the investments are not cost-effective. The delays in the FC module have also had an impact on the efficiency of the TC module.

Development-policy results

The infrastructure facilities constructed as part of FC have only achieved the goal of reducing environmental and health risks to a relatively limited extent. In some cases, new environmental risks have actually arisen.

The TC module has achieved overarching development-policy results to the extent that capacity in the wastewater sector has been strengthened among authorities at national and provincial level, extensive framework legislation has been adopted for Vietnam and the country has begun to introduce wastewater disposal and management based on law and geared towards business criteria.

Results at regulatory level

As part of the TC module, the programme provided advice to the Ministry of Construction and the provincial governments, among other addressees, on developing and modifying legal framework conditions. At national level, the wastewater programme was involved in developing a series of laws and decrees. GIZ's policy advice thus made a key contribution to revising the legal framework conditions and played a major role in shaping sector reform. At provincial level, the TC module supported the relevant authorities in capacity development and in devising strategic orientation plans for sustainable wastewater management and cost-covering tariff roadmaps.

Conclusions

The evaluation provides pointers to structural problems in German DC and its steering. In particular, the following questions arise:

The first question concerns the extent to which the problems analysed could have been foreseen during appraisal and planning of the programme (and were not taken into account accordingly). To prepare the programme, a total of six missions were carried out, and Vietnam had already been a partner country of German DC for many years at the time (2001–2003), so experience had already been acquired with implementing programmes. It is therefore difficult to see why features of Vietnamese administrative action and the construction sector were not recognised or at least not taken into account in the schedule. It must also be asked why specific conditions in Vietnam's wastewater disposal were not taken into account when designing the sewage treatment plants despite the fact that various appraisal missions had been carried out. This very considerably reduced the effectiveness of the sewage treatment plants, some of which are too large. In summary, it must be queried whether the wastewater programme, and the FC module in particular, should actually have been approved in this form and whether the commission should actually have been placed.

Moreover, it is questionable whether the type and extent of the information provided by the implementing organisations are suitable to enable BMZ to carry out appropriate political steering. The evaluation shows that reporting by the implementing organisations in this programme has not been ideal in the past. The level of details provided in the reports repeatedly did not meet BMZ's need for information. In the joint reporting by the implementing organisations on the programme, there were no informative analyses and above all no recommendations for action to be taken by BMZ, despite the fact that the programme was classified as 'high risk'. According to the evaluation, reporting in line with the joint procedural reform formats will not solve the problem regarding information.

A critical look should be taken at the function and involvement of the sector division. In the current form, it does not contribute to providing specialist support or advice to the wastewater programme.

Taking the wastewater programme in Vietnam as an example, the findings of this evaluation cast doubt on cooperation projects and joint FC/TC programmes as an instrument. Due to the system-based differences in the basic legal aspects, communication structures and processes of FC and TC, it is questionable whether it is expedient to combine them in a single programme if TC implements the programme itself and FC is primarily dependent on decisions taken by the loan recipient. This is particularly true if it creates a dependency that poses an obstacle to implementation of TC measures and detracts from their success.

In actual fact, with its combination of FC and TC modules, German DC offers a package that distinguishes it from the purely financial assistance provided by new donors. However, if the schedules and content of the individual modules are poorly coordinated during implementation, despite a degree of interdependence, this at least partly, if not completely, cancels out the added value inherent in this kind of combined solution.

The different times at which the modules ended, or rather the end of the TC measures, can be assumed to have a negative impact on the desired results and the sustainability of the measures.

Finally, there is considerable room for improvement in communication within the programme. In particular, the engineering firms/consultants do not appear to have been sufficiently integrated into communication structures and programme coordination. Increased effectiveness or even synergies are prevented if the experts deployed in the partner country do not communicate with one another and do not coordinate their activities (or are not even aware of one another).

The evaluation arrived at the following overall recommendations:

Recommendations to KfW:

We recommend that KfW should provide appropriate advice and assistance on the proper use of the loans to loan recipients who are not familiar with the rules concerning the use of loans to which conditions are attached.

Recommendation to GIZ:

We recommend that GIZ should develop proper strategies for further support for the provinces and operators. In this context, the 'traveller system' of intermittent assignments with responsibility for implementation could be considered.

Recommendations to GIZ and KfW:

Technical experts from the consulting firms who are going on an assignment should be prepared for a joint programme in terms of content in both the implementing organisations involved, and coordination with the TC component should be part of their terms of reference. They should continue to be regularly and heavily involved in programme coordination.

We recommend that the implementing organisations provide BMZ with more frequent and more detailed reports about the situation in programmes, explicitly mention problematic aspects, reveal problems with

implementation, address possible political steering inputs at an early stage and request assistance from the political level, if necessary.

Recommendations to BMZ:

We recommend that capacity building should be carried out in the sector division and that the division should be involved more heavily in technical support for complex programmes. This includes the option of project visits.

The country officers should be allowed to undertake more and longer business trips to visit project sites more often and to be able to set up and maintain closer contact with decision-makers in the partner country.

Independently of the phasing out in 2013, within the scope for shaping the programme, we recommend that BMZ should commission GIZ to implement training and advisory measures for provinces and operating companies even after 2017 until all the plants have gone into operation and to draw up flexible commissions and service contracts.

The development cooperation officers should be involved in political support for projects, especially in the case of programmes outside the priority areas.

For example, BMZ should hold sector meetings twice a year in which it can discuss in detail the current situation in the sector, any problems and possible courses of action with the stakeholders involved at the implementing organisations.

Any delays may entail substantial risks in the implementation of lengthy infrastructure projects in which TC and FC measures are mutually interdependent, which may jeopardise the sustainability of the approach. In similar programme arrangements, these risks should be taken into account during planning and implementation. We therefore recommend that cooperation projects/programmes as a DC instrument should be subjected to a systematic evaluation, examining whether the present approach of combining the measures in a single programme does in fact have positive effects in terms of the desired results of development projects or whether it leads to problems in the implementation of programmes.