











Rural water supply systems and the role of the private sector

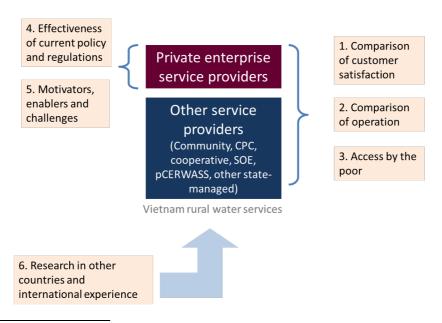
Summary of research findings and recommendations

Background: The rural water supply sector has developed significantly in recent years, with the National Target Program (NTP) for Rural Water Supply and Sanitation driving structural reforms and large increases in access to clean water. Yet challenges remain: access to safe water in rural areas lags behind urban areas, and particular efforts are needed to improve access for the poorest.¹

In line with Government of Viet Nam (GoV) policy (Decision 131/2009/QĐ-TTg), the private sector is playing an increasing role, with small to medium enterprises contributing to service delivery. This trend will continue, including scale-up under the direction of recent government regulations such as Decree 15/2015/NĐ-CP on public-private partnerships. It is timely to review current evidence on the private sector in rural water supply, with a view to supporting effective arrangements for private involvement that deliver public policy outcomes, and to supporting broader improvements in the rural water sector.

Internationally there are on-going debates on state versus private management of water provision, with pros and cons demonstrated on both sides. What remains clear, regardless of the model, is the need for verifiable performance indicators to ensure service standards and asset conditions are maintained and that mechanisms are put in place to ensure equitable outcomes.

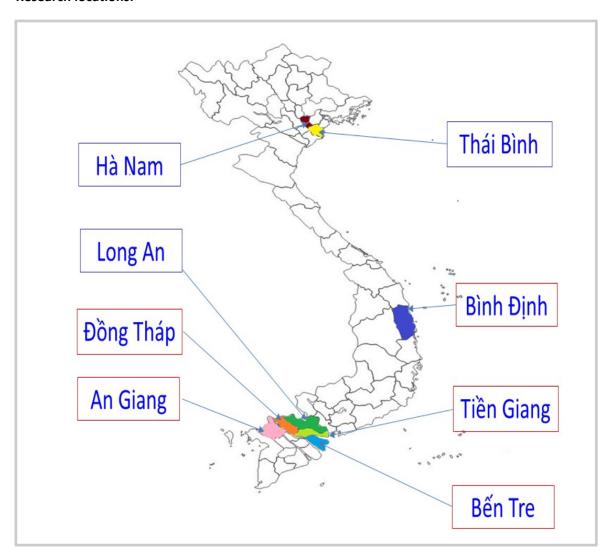
Research focus: The research² examined five key areas in the rural water supply sector concerning private enterprise service providers and other types of service provider, shown below.



¹ Vietnam Multiple Indicator Cluster Survey 2011

² Supported by the Australian Government Department of Foreign Affairs and Trade (DFAT) this research partnership was developed between Institute for Sustainable Futures at University of Technology Sydney (ISF-UTS), Institute for Water Resources and Economic Management (IWEM), East Meets West Foundation (EMWF) and Centre for Research of Environment and Natural Resources at Vietnam National University (CRES-VNU).

Research locations:



Research methods:

- 1. *Operator survey*: Interviews with 15 private enterprises and 15 other service providers (three community managed, two cooperatives, five commune people's committee (CPC) and five state-owned entity) (Ha Nam, Thai Binh, Long An)
- 2. *Customer satisfaction survey*: Interviews with 900 households for 30 schemes managed by above mentioned service providers
- 3. Equity outcomes survey and mapping:
 - a. Phase 1: Interviews with 316 households (101 poor and 215 non-poor), 35 private enterprises and 32 other service providers, 61 commune leaders (Tien Giang, Dong Thap, Ben Tre, An Giang, Long An, Ha Nam, Thai Binh, Binh Dinh)
 - b. Phase 2: Six commune case studies, involving 800 registered poor households, 8 private enterprises and 10 other service providers (Ha Nam, Thai Binh, Tien Giang)
- 4. *Policy and regulatory review*: Survey in eight provinces (Tien Giang, Dong Thap, Ben Tre, An Giang, Long An, Ha Nam, Thai Binh, Binh Dinh)
- 5. *Enterprise motivators, enablers and challenges survey*: Interviews with 20 private enterprises (Tien Giang, Dong Thap, Ben Tre, An Giang, Long An)

Research findings:

Service provision by private enterprises

- Finding 1: In the three provinces of Thai Binh, Ha Nam and Long An private enterprises provided slightly better services to other types of service provider.
- Finding 2: The private sector was found to be a significant source of investment in Thai Binh, Ha Nam and Long An, and can contribute to the limited state budgets available to extend services.
- Finding 3: The incentive policies to encourage private enterprise participation (described in Decision 131/2009/QĐ-TTg) are partially applied, and some government processes for enterprises to access these incentives are overly complicated, therefore those policies are difficult or do not work in practice.

Access to services by the poor

- Finding 4: In communes offering access to piped water services, the poor were less likely than the non-poor receive services, with connection fees found to be the predominant barrier (rather than tariffs).
- Finding 5: Private enterprises generally charged higher connection fees and higher tariffs than other types of service providers. And whilst private enterprises provided discounts or payment by instalments more often than other service providers, these subsidies were not systematically offered or communicated to poor customers.
- Finding 6: When decisions are made about the location and service area of new services, the
 focus is on achieving economies of scale and limited attention is given to ensuring that the poor
 receive services.

Planning and regulation in rural water supply service provision

- Finding 7: In several provinces planning of rural water construction and services development was uncoordinated, did not involve appropriate review and adjustment processes, and selection processes for private enterprises were not transparent.
- Finding 8: Participation by the mass organizations (Women Union, Youth Union, and Veterans Association) and by the water user community was to be limited in private enterprise project proposals, project approval, construction monitoring and verification, operation arrangements and water quality monitoring and reporting.
- Finding 9: There are significant gaps and issues in the regulatory framework for rural water supply at provincial level to define roles and responsibilities of the state, service providers and consumers, affecting on-going quality of services by private enterprises and other service providers.

Evidence to support research findings:

Finding 1: In the three provinces of Thai Binh, Ha Nam and Long An private enterprises provided slightly better services to other types of service provider.

The operator survey revealed that private enterprises had better tariff collection that state-owned enterprises (though lower than other service providers), slightly lower water losses (likely due to lower age), and significantly higher profit (due to a combination of higher tariffs and higher productivity per worker). The higher revenues for private enterprises, if reinvested to ensure ongoing operation and maintenance, have potential to ensure sustainability of service provision.

Operation parameter	Private enterprises (n = 15)	State-owned enterprises (n=5)	Others (community, CPC, cooperative) (n =10)
Average age of the system	7 years	10 years	10 years
Read production meter at least monthly	93%	100%	90%
Monthly tariff collection	80%	60%	90%
Water losses	24%	27%	28%
Percentage of profit compared to total revenue ³	35%	20%	16%
Water distributed per worker	3850 M ³	3807 M ³	970 M ³
Revenues per worker	23.16m VND	20.18m VND	3.78m VND

From the customer's perspective, perceptions of water availability were slightly better for private enterprises, and perceptions of water quality were slightly worse. Private and state-owned enterprises were perceived to have better scheme management than other service providers. The higher number of breakdowns reported for private enterprises is due to three older small-scale private schemes in Long An, and results for private enterprises in Ha Nam and Thai Binh are better.

Customer satisfaction parameter	Private enterprises (n = 15)	State-owned enterprises (n=5)	Others (n =10)
Water availability: average user	3.7	3.5	3.5
satisfaction score* (min-max)	(2.63-4.23)	(2.63-4.23) (2.13-4.03)	
Water quality: average user	3.7	3.7	3.9
satisfaction score *(min-max)	(2.50-4.23)	(3.70-4.2)	(2.67-4.4)
Management: average user	3.8	4.0	3.2
satisfaction score *(min-max)	(3.23-4.28)	(3.08-4.1)	(3.25-4.37)
System breakdown three or more times per month (%)	33	0	8
Repairs take longer than 1 day	19%	23%	15%
24 hour supply	30%	38%	20%

^{*} Rating scale is 1-5, where 1 = Very Bad and 5 = Very Good.

Across the whole sample, customer's general assessment on the piped water source and the ability to have access to piped water for different management models was slightly higher for private water enterprises.

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³ excluding depreciation

Finding 2: The private sector was found to be a significant source of investment in Thai Binh, Ha Nam and Long An, and can contribute to the limited state budgets available to extend services.

For many years, investments to construct rural water supply systems have mainly been made using the states' budget. The demand for increased access to services is high, whereas the state's ability to meet this demand is limited. The engagement of the private sector across the country as a whole is limited (3.7% private sector investment compared with 38.8% state and donor investment⁴).

The experience from Thai Binh, Ha Nam and Long An shows that the private sector's resource is significant. Since 2012 (when there was the policy to encourage the private sector's investment), the investment capital of the private sector has accounted for 39% of the total investment capital for building rural water supply systems, accounting for 42% of the total designed water supply capacity of the rural water supply systems in Thai Binh. For Ha Nam province, the private sector's investment capital accounts for 25% and accounts for around 30% of the total water supply capacity. The types of private sector participation include build-own-transfer (BOT)⁵, build-own-operate (BOO) and operation and maintenance (O&M) as described in Decree no. 15/2015/ND-CP. This increase in investment by private sector in Ha Nam and Thai Binh has been prompted by the states' fiscal budget support. In Ha Nam province, all the projects are supported with the state's budget at the maximum level regulated by the Decision 131/2009/TTg (from 60-75% of the total investment).

Finding 3: The incentive policies to encourage private enterprise participation (described in Decision 131/2009/QĐ-TTg) are partially applied, and some government processes for enterprise to access these incentives are overly complicated, therefore those policies are difficult or do not work in practice.

The application of incentives for private enterprise participation in eight provinces shows:

- 1. Land incentive: In most provinces (7/8) this incentive is working well, with one province noting that it is complicated (Tien Giang).
- 2. Tax incentives: are effective and well-implemented, however not all private enterprises in the Mekong were accessing this incentive.
- 3. Tariff subsidy mechanism: This is only applied in one province (Tien Giang), is reported to be inappropriate or infeasible in four provinces (Long An, An Giang, Ha Nam and Thai Binh) because subsidy is paid from the province's budget while this budget is always limited.
- 4. Subsidy support from fiscal budget: Variable responses from provinces as to whether the support is sufficient (3/8 say it is just enough, 2/8 say too little, and in 3 provinces with multiple respondents, responses vary and several do not know). Payments from government to enterprises are not timely. Although the water systems are completed, the state's payment for enterprises currently just reaches 10% in Thai Binh and 45% in Ha Nam.

	Projects regarding the private sector (m VND)*				Amount subsidised	Rate
Province	Number of projects	Total investment	Investor's capital	State's subsidy	by state to date (m VND)	(%)
Ha Nam**	14	488.049	204.670	283.379	127.749	45.1
Thai Binh**	13	1.109.959	755.359	354.600	35.025	9.9

⁴ National report on implementation results of NTP 2013

⁵ These are mostly in Ha Nam, where private investors have the right to operate the system for 30 years

** The data is for the projects that are on-going construction and have been completed (12 projects in Ha Nam and 5 projects in Thai Binh)

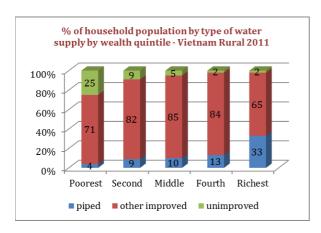
5. Credit policy: This incentive is not very effective in half of the provinces (4/8) where it is viewed as hard to implement due to complexity and because enterprises are often unable to meet the condition of providing collateral. Two provinces gave no response and two provinces have mixed responses (Ha Nam and Thai Binh). In only two provinces were there examples of enterprises accessing credit (Binh Dinh and Tien Giang). Interviews with 20 private enterprises revealed access to credit as a key constraining factor to upgrading and extending water schemes.

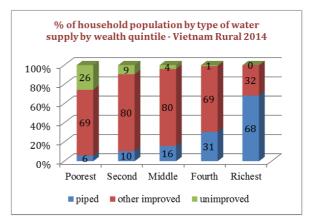
Ease of implementation other government processes and level of support for private enterprises:

- Guideline on tariff calculation in Decree 117/2007/NĐ-CP and Circular 75/2012/TTLT-BTC-BXD-BNNPTNT is found to be easy to implement by some provinces and not by others. Three provinces reported that it is easy, however one province (Dong Thap) reports it to be difficult, and in Thai Binh different stakeholders all gave different responses.
- According to pCERWASS private sector were reported to be 'well supported' in most of the sampled provinces (5/8) however in two provinces there 'remain difficulties' (Binh Dinh and Ben Tre).

Finding 4: In communes offering access to piped water services, the poor are less likely than the non-poor receive services, with connection fees found to be the predominant barrier (rather than tariffs).

Data on access to safe water supply in Vietnam in 2011 and 2014 shows that the richest quintile are gaining access to piped water supply at a much faster rate than other wealth quintiles, and the poorest quintile have a very low level of access (6%) (MICS, 2011 and MICS, 2014).





Source: 2011 Vietnam multiple indicator cluster Survey

Source: 2014 Vietnam multiple indicator cluster Survey

Issues for the poor to access services are not confined to those provinces with lower coverage overall (e.g. mountainous provinces) but also are evident in coastal areas and the Mekong Delta.

Six case study communes in Ha Nam, Thai Binh and Tien Giang revealed that the poor were statistically *less likely* to be connected than non-poor in absence of any support mechanisms (and sometimes even in their presence) (see Figure 1 below). *Affordability* was the main reason households were not connected to piped water supply (85%- 100% of non-connected households interviewed in Phase 1 cited this reason). Case studies revealed *connection fees* are the main barrier

for the poor to access piped water (less so than tariffs). The majority (66%) of non-connected poor households responded that the connection fee was the reason they were not connected.⁶

The six case studies revealed that the service provider type (private enterprise or other service provider) was not a key factor in influencing whether the poor are connected or not (that is, the poor are not worse off with respect to a particular provider type).

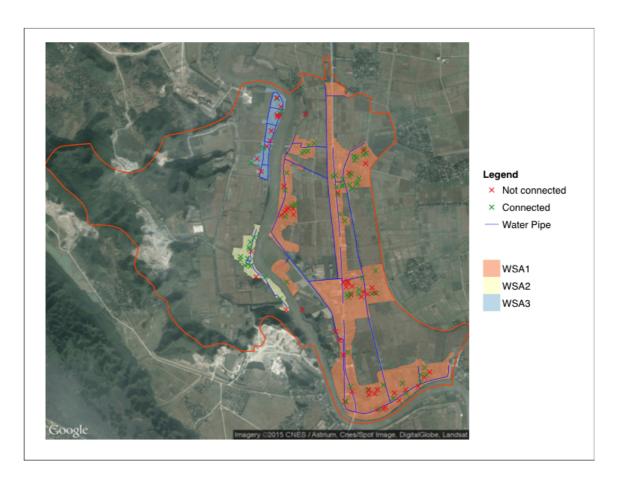


Figure 1: Example from one case study showing locations of registered poor households who are connected and not connected to piped water systems of three water service providers in Thanh Hai commune, Thai Binh. In this commune the poor are both statistically less likely to live in a service area, and for those poor households living in the service area, are also less likely than the non-poor to be connected to the piped water system.

Finding 5: Private enterprises generally charged higher connection fees and higher tariffs than other service providers. And whilst private enterprises provided discounts or payment by instalments more often than other service providers, these subsidies were not systematically offered or communicated to poor customers.

In eight provinces, interviews with 35 private enterprises and 32 other service providers it was found that private enterprises can have higher connection fees and higher tariffs, but also offered subsidies and exemptions more often than other service providers:

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⁶ Other reasons reported were 'Tariff unaffordable' (8% of respondents) Happy with existing water source (9% of respondents), Connection not offered (4% of respondents), Other reason (12% of respondents)

- **Higher connection fees**: Private enterprises in Ha Nam, Thai Binh, and Binh Dinh Provinces had median connection fees that were double the connection fees for other types of service providers (1,500,000 VND for private enterprises and 700,000 VND for other service providers).
- **Higher tariffs**: Similarly, median tariffs of private enterprises in the Mekong Delta Region were higher that tariffs of other service providers, with a difference of 1750 VND/M³. This is supported by the customer satisfaction survey which also showed that private enterprise tariffs were 30% higher than for other service providers in Long An, Ha Nam and Thai Binh.
- **Greater frequency of subsidies**: 70% of private enterprises in the Mekong Delta region offered tariff subsidies (against only 18% of other service providers) and 50% private enterprises offered subsidies for connection fee (against only 22% of other service providers). Similar findings were noted in Binh Dinh, Ha Nam and Thai Binh.

These tariff subsidies were applied voluntarily by the relevant service providers, without the prescribed support from the State according (water tariff subsidy described in Decree 117/2007/NĐ-CP). The process for approving subsidies form the State (connection, water tariff exemption) is complicated therefore it does not appear to be implemented. Based on interviews with private enterprises, their ability to offer subsidies and exemptions more often than other service providers may be due to their autonomous, flexible management arrangements, and for some enterprises, was due to external donor support and output-based incentives to serve the poor.

These subsidies were *not systematically communicated to poor customers*. For instance most householders interviewed reported not knowing about subsidies when they connected to the scheme. Information about the State's policy to provide support to poor households has also not been disseminated widely, therefore, people do not know about these policies. One province has recently applied a regulation with legal underpinnings that means service providers are obliged to provide connections (Tien Giang) which means no connection fee can be imposed and that the poor will be able to gain access to services more easily.

Finding 6: When decisions are made about the location and service area of new services, the focus is on achieving economies of scale and limited attention is given to ensuring that the poor receive services.

Based on interviews with 35 private enterprises and 32 other service providers in 8 provinces, it was found that *enterprises play a significant role in planning who will be served* by a new water system. Private enterprises were reported to have a strong influence on decisions about who is served and the location of infrastructure and the service areas, particularly in the Mekong Delta, where local authorities appeared to play a limited role in such decisions. In Ha Nam, Thai Binh and Binh Dinh both private enterprises as well as the provincial people's committee (PPC) were reported to have a strong influence. The most important factors reported as important to decision making about the location and the area to be covered by new services was *'customers' need for water'* (demand) followed by *'density of houses'* and *'distance from water sources'* (to achieve economies of scale) providing services for the poor was reported to not be a significant factor (by either private enterprises or other service providers).

Finding 7: In several provinces planning of rural water construction and services development was uncoordinated, did not involve appropriate review and adjustment processes, and selection processes for private enterprises were not transparent.

Decision making about new investments varies from province to province, and in general is opportunistic and uncoordinated. It may be initiated by private enterprises (e.g. in Mekong) or planned by provincial authorities (Binh Dinh) or a combination of provincial planning and interaction with private sector (Ha Nam and Thai Binh). This lack of clear planning processes for service provision is leading to ad hoc investments which do not maximise efficiency or effectiveness, and also poses risks for coordinated management of water resources.

Six (of eight) provinces say that their annual planning is not active or difficult mostly because the PPC must wait to hear about the State's resource allocation under NTP3. Only two provinces reported that their annual planning is suitable (An Giang and Dong Thap). Competitive tendering processes are not generally used and appointment of private enterprise providers is not yet transparent. In addition, there are limited clear processes for private enterprises to take over systems currently under other management models (eg water user group).

There is high potential for 'cherry picking'- a phenomenon where private sector only invest or become involved in schemes that will be more profitable, and the state is left to manage the more difficult, less viable schemes (without the potential to cross-subsidise with higher-profit schemes). Almost all responses from interviewees in Thai Binh, Ha Nam and Long An on the most suitable schemes to be suggested for private investment are ones with "Return on Investment soon" or "easy payback".

Finding 8: Participation by the mass organizations (Women Union, Youth Union, and Veterans Association) and by the water user community was to be limited in private enterprise project proposals, project approval, construction monitoring and verification, operation arrangements and water quality monitoring and reporting.

The policies encouraging the participation of private sector in three provinces have not yet included the role of the mass organizations or regulated the community consultation in process of proposing and implementing investment projects on rural water supply systems by private investors.

Interviews with the 15 commune leaders in Thai Binh, Ha Nam and Long An where new projects involving private investment showed that these projects' implementation involved agreement with the commune people committee (CPC) but without a process of the community consultation. Practically, through scanning some investment reports of projects set up by privates in three province (Thai Binh, Ha Nam and Long An), there is almost no contents on community consultation. Review of investment reports shows that this is in contrast to projects invested by public sector which included such consultation.

In addition, involvement of Women's Union in decision making about water systems was not found to be valued, except by some commune leaders. Interviews with 35 private enterprises and 32 other service providers and 61 commune leaders (across Tien Giang, Dong Thap, Ben Tre, An Giang, Long An, Ha Nam, Thai Binh, Binh Dinh) showed that most private enterprises (85%) and all other service providers (100%) thought that involvement of Women's Union on decisions about water systems

was *not important*. Commune leaders gave slightly more mixed responses, in that in the Mekong Delta, some commune leaders (40%) thought involvement of the Women's Union was important (and 60% thought it was not important) and in the mid and northern provinces some commune leaders (26%) noted that their involvement was important (and 74% thought it was not). In addition, in both southern provinces and mid and northern provinces, Women's Union were considered *not to have an influence* on who is served by private enterprises, other service providers and commune leaders.

Finding 9: There are significant gaps and issues in the regulatory framework for rural water supply at provincial level to define roles and responsibilities of the state, service providers and consumers, affecting on-going quality of services by private enterprises and other service providers.

Regulatory frameworks providing the legal foundation for the relationship between state, service providers (including both private enterprises or other service providers) and service users were found to be limited or absent. Gaps revealed during this research included:

- 1. Lack of formal agreements between state and water service providers (concerning asset ownership and condition, service performance standards, management responsibilities): In Thai Binh only an investment certificate exists rather than legally binding obligations. In Ha Nam, there is the written document approving the investment project of the provincial People's Committee. In Long An, there is only a permit for exploiting the underground water and the business registration certificate as per other normal business activities.
- 2. Insufficient accountability of service providers to service users: Community engagement and mechanisms to hold service providers to account are absent, as is widespread use of service agreements between consumers and water service providers. Only two provinces had some mechanism to support monitor or receive complaints (Dong Thap commune-level system, Binh Dinh have a "Safe Water Committee).
- 3. Overlapping and unclear at provincial, district and commune levels and management by more than one agency leads to dispersed and unclear control
- 4. Inadequate implementation of water quality monitoring and oversight: Reported frequency of monitoring was highly variable across 8 provinces (from monthly to quarterly to 6 months), many respondents (amongst pCERWASS and providers) did not have knowledge of the water quality criteria, and enforcement is reported to be varied (only 4/8 provinces reported good enforcement).
- 5. Lack of economic and technical norms for rural water supply systems: These are much needed to provide a sound basis to understand appropriate costs for rural water systems.
- 6. Lack of appropriate methods for tariff setting: the current approach of defining a 'floor' and a 'ceiling' (see below) in each province has limitations in that the prices are not able to be set in relation to the cost structures for each individual scheme (which may vary considerably, particularly with respect to mountainous areas etc.).

These gaps in the regulatory framework affect ability to incentivise private provision as well as ensure effective public policy outcomes across all management models /service provider types.

Research recommendations:

This research points to a range of important actions for the Government of Vietnam and other stakeholders at national and provincial levels. Formation of a Task Force to plan, implement and have oversight of these recommendations will be needed.

Actions both to support appropriate and effective participation of private sector as well as to support the overall rural water sector (including all types of service provider) are required. Critically, there must be a strong focus on appropriate arrangements for ensuring *on-going quality services*, rather than a limited focus on *initial construction and investment*.

The three outcomes sought by the recommendations are:

- To attract interest from the private sector for better services and investment
- To ensure the poor receive access and are not excluded
 To ensure, that regardless of the service provider type, quality of on-going services is maintained

The recommendations cover the following areas:

- Recommendation 1: Water tariffs
- Recommendation 2: Technical and economic cost norms
- Recommendation 3: Implementation on PPPs (Decree 15)
- Recommendation 4: Incentives for private sector participation
- Recommendation 5: Budgets
- Recommendation 6: Access to finance
- Recommendation 7: Regulation and oversight
- Recommendation 8: Training

Recommendation 1: Water tariffs

At national level:

MARD and MOF should review and revise the current Circular outlining tariff setting, and whilst maintaining the principle of cost-recovery, develop a realistic approach that can be more easily implemented by the provinces. This approach should support tariffs to be developed and fixed as part of a contract with a service provider (based on the cost structure of each water scheme), setting an initial tariff and an index formula to adjust the tariff (automatically) with review every 5-10 years. This approach should include integration of connection fees (at least for poor and near poor) as part of the pricing and cost-recovery structure. MARD and MOF should set up a monitoring and review process for implementation of a revised Circular.

At provincial level:

PPCs should implement the prescribed approach developed by MARD and MOF, including subsidising costs from the provincial budget where needed (in cases where cost-recovery is not possible). Where there are constraints to its implementation, provinces must develop and operationalise an alternative approach.

Recommendation 2: Technical and cost norms

At national level:

MARD should develop technical and economic cost norms for rural water supply as soon as is possible, ideally prior to end of December 2015.

At provincial level:

PPCs should utilise the technical and economic cost norms developed by MARD, adjusting them as suitable to that province.

Recommendation 3: Implementation on PPPs (Decree 15)

At national level:

MARD and MPI should develop national guidelines to implement the Decree 15 regarding PPP in rural water supply that are 'fit-for purpose' and appropriate for small-scale PPPs. These guidelines should be informed by international research on the characteristics of successful PPP's (that meet public policy objectives) in the rural water sector, and best-practice risk-based approaches for different types of PPP.

At provincial level:

PPCs in each province should use the national guidelines to develop province-specific guidelines and monitoring arrangements for PPP's suitable to that province. In doing so, PPCs should consider locations where private-managed and where state-managed systems will be more appropriate (including consideration of the province as a whole and how to plan for services to the whole province).

PPCs, DPI, DOF and pCERWASS should develop transparent, competitive processes for tendering new (and existing or upgraded) schemes by making public lists of projects for investment, and by including processes for verification of technical quality checks. An output based mechanism for government support to private sector on completion of system built to a certain technical quality should be piloted.

Recommendation 4: Incentives for private sector participation

At national level:

MARD should issue a Directive such that Provinces are required to follow Circular 37/2014/TTLT-BNNPTNT-BTC-BKHĐT to operationalise Decision 131/2009, in particular ensuring better guidance operationalise the two following policy incentives which are currently not well-implemented: (i) access to credit for private water investors and (ii) state fiscal budget support. Within these mechanisms, MARD should also develop additional incentives to attract investment and participation by 'social enterprise' in rural water sector (as established under the 2014 Enterprise Law).⁷

MoH should consider roles for potential private sector participation in water testing laboratories.

At provincial level:

PPCs should develop their own mechanisms to operationalise the incentives described in Decision 131/2009 and following MARD's directive.

Recommendation 5: Budgets

At national level:

MARD and MOF should review state allocations to rural water supply and allocate state budgets for investment in water systems to provinces that will be less viable for private enterprises. This process should be informed by existing inequalities in access to services in different regions and different wealth quintiles (available through MICS data).

MARD should issue a Directive to the provinces that at least 10% of the New Rural Development

⁷ Social enterprise are a suitable form of enterprise for water service provision as under this model the majority of profits are reinvested in maintaining or upgrading water schemes and the social purpose (including serving the poor) is given primacy over profit-seeking objectives.

(NRD) Funds are prioritised for water and sanitation, and that provinces develop Medium-Term Expenditure Plans for the upcoming 5 years.

At provincial level:

PPCs should develop Medium-Term Expenditure Plans for the upcoming 5 years.

PPCs, DPI and DoF should ensure that the state fiscal budget support mechanism for private enterprise investments can be operationalised in a timely manner to provide certainty to investors.

PPCs should ensure fiscal budget support to new providers includes a requirement that service providers must offer free (or discounted or payment by instalments) connections for the poor and near-poor, potentially implemented using an output-based approach.

PPCs should review allocations to rural water supply and use state budgets to invest in water systems in those districts that will be less viable for private enterprises.

Recommendation 6: Access to finance

At national level:

MARD should ensure continued allocation of funds to Vietnam Bank for Social Policy to provide loans to ensure the poor can access services.

MARD should develop a mechanism to provide subsidies through certain banks such that these banks provide loans to private enterprises investing in water schemes.

At provincial level:

PPCs should provide incentives for local banks to provide finance to private enterprises investing in water schemes.

Recommendation 7: Regulation and oversight

At national level:

MARD should prioritise development of guidance for provinces on appropriate regulatory arrangements for rural water supply service delivery. Such guidance should include water service performance standards for both PPPs and other service providers. Areas to be covered include:

- asset ownership and asset management (building on Circular 54, but including identification of who owns the asset)
- risks and risk mitigation for all parties (particularly for PPPs)
- minimum standards for levels of participation by users and mass organisations in planning processes
- complaints and response mechanisms
- service performance standards in terms of: water quality; water quantity; response times for breakages; consumer contracts; ensuring access for the poor; environment; performance monitoring and reporting
- · water resources management

Such guidance should include example contracts for agreements between service providers and the relevant government agency, and examples of agreements between service providers and service users.

MARD should support on-going development and expansion of NCERWASS' and PCERWASS monitoring, evaluation and reporting in the sector, in line with the above regulatory arrangements, and including information important for water resources management.

MARD should support research into water quality status (of all water sources used by communities, including formal service provision) and the potential for increased use of water safety planning.

At provincial level:

PPCs in each province should determine respective roles and authority for each of pCERWASS, DARD, DoF, DPC and CPC, concerning water service master planning including annual review and adjustment of these plans and coordination with areas (eg transport, water resources etc.).

PPCs with pCERWASS should develop provincial regulations in line with the national regulatory guidelines described above.

PPCs, DoH, pCERWASS and other relevant agencies to develop strict compliance mechanisms for ensuring water quality monitoring including transparency to users of water quality results. For instance lack of compliance could result in PPC imposing reduced water tariffs on a service provider or revoking an operating licence. Provinces currently without water quality testing facilities should urgently allocate funding to develop these facilities.

PPCs to develop province-wide processes to enhance the participation of the social organisations in planning and oversight of rural water supply services, consulting broadly to enhance participation, transparency and accountability, and developing a complaints and response mechanism.

Recommendation 8: Training

At national level:

MARD and NCERWASS should provide awareness-building activities for PPCs and provincial governmental agencies on involvement of private sector in rural water supply, including development of appropriate regulatory arrangements to ensure on-going quality of service delivery and to manage and mitigate risks for all parties.

At provincial level:

pCERWASS should provide training to service providers (both private enterprises and other service providers) to improve technical and institutional functioning (e.g. cost-recovery) of these service providers.

DARD, pCERWASS and DoH to continue behaviour change communication activities with users to promote importance of use of safe water sources and the need for tariffs to cover costs for providing these services.

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