

A BRIEF REVIEW OF SERVICE  
DELIVERY CONCEPTS ■ ■ ■

A literature review



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# A BRIEF REVIEW OF SERVICE DELIVERY CONCEPTS

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Over the past two to three decades, there has been relative success in providing new, rural water infrastructure—building the physical systems—and driving increased coverage levels. However, despite this positive trend, there has to a large extent been a failure to find durable solutions that meet the needs of the rural poor for safe, reliable domestic water.

People in rural areas continue to face unacceptable problems with systems that fail prematurely, leading to wasted resources and false expectations. Although figures vary, studies from different countries indicate that approximately 30 to 40% of systems either do not function, or operate significantly below design expectations. Constructing physical systems is an

obvious requirement, but it is just one part of a more complex set of actions that are needed to provide truly sustainable services, as increased coverage does not equate to increased access.

A tipping point may now have been reached, however, with national governments and development partners beginning to recognise the scale of the problems associated with poor sustainability and the threat this in turn presents to achieving the WASH Millennium Development Goals (MDGs). Discourse on sustainability is now shifting from a focus on one or two individual factors, to requirements for addressing the underlying causes in a more holistic, systemic way.

Sustainable Services at Scale (Triple-S) is a six-year learning initiative with the overall goals of improving sustainability of rural water services and bringing about greater harmonisation through increased sector capacity. The initiative is managed by IRC International Water and Sanitation Centre in the Netherlands and works in partnership with international, national and local partners. Further details on the initiative can be found at: <http://www.irc.nl/page/45530>.

Triple-S aims to act as a catalyst for transforming current approaches in improving the rural water sector from piecemeal projects that often involve one-off construction of water systems, to indefinitely sustainable rural water services delivered at scale. Working in two initial focus countries—Ghana and Uganda—the initiative will seek to encompass a further two countries by 2010. As part of the initiative's start-up, a broader research and scoping exercise was additionally conducted in a range of countries. From this research process, 13 country studies—each providing an overview of country-specific experiences with rural water service delivery—were produced.

In parallel to the research and scoping exercise, two literature reviews were also conducted. The literature reviews extend and add to Triple-S' research by taking innovative experiences and drawing lessons from other non-study countries, as well as other sectors such as health, education and agriculture.

Two streams or outcome areas for the literature review have so far been identified, adding greater contextual *value* to the 13 research studies, thereby contributing to a broader body of knowledge. In summary these include:

1. An investigation of existing literature on **service delivery concepts**, in particular examining how service delivery is defined and applied in rural populations by other sectors (i.e. health, agriculture, and similarly infrastructure-dependent sectors such as electricity), and how each differs and/or resembles practices in the rural water sector.
2. A systematic review and assessment of a selected body of literature around **aid harmonisation** and **aid alignment**, looking in particular at how these have influenced and been operationalised in the water sector. This review includes a summary of the analysis and lessons to date, as well as a comparison of experiences with other development sectors such as health and education.

A review of literature across what could be termed a third stream—**service delivery models (SDMs) for rural water**—is expected to be conducted and made available at a later stage. This piece will examine the SDMs of countries outside of those already covered in the research studies.

The literature reviews are based on a number of concepts regarding rural water service delivery, which are important to outline from the outset.

The **service delivery approach (SDA)** is a conceptual ideal of how water services should be provided. It is rooted in the shift in focus from the means of service delivery (the water supply systems or infrastructure), towards the actual service accessed by users, where access to a water service is described in terms of a user's ability to *reliably and affordably* access a given *quantity* of water, of an acceptable *quality*, at a given *distance* from her or his home. A water service consists therefore of the *hard* and *soft* (*physical and other infrastructure*) systems required to make this access possible.

A key assumption of the approach is that, in a given context, the principles behind the SDA should be applied through one or more agreed **service delivery model or models (SDMs)**. SDMs provide agreed frameworks for delivering service. An SDM is developed within the parameters of a country's existing policy and legal frameworks which define: norms and standards for rural water supply; roles, rights and responsibilities; and financing mechanisms. At intermediate level, an SDM can articulate the provision of the service to an entire population in a

■ ■ ■ **BOX 1:** WHAT IS THE DISTINCTION BETWEEN THE SERVICE DELIVERY APPROACH AND A SERVICE DELIVERY MODEL?

The underlying *concept* of the water delivery approach is defined as sustainable water services, delivered in a harmonised and cost-effective way, at scale within a district. This is a universal approach, or paradigm, with common principles and benefits that can help unblock the problems of the past. However, when applied in practical terms in any given context, we argue that a model that is researched and developed must reflect the realities of a specific country and the service area, including the type of rural population, levels of social and economic development and relative strength of the public and private sector. In simple terms, the water service delivery approach is the concept and the water service delivery model is the application.

given area usually served by a variety of systems. In a country, or even within a single decentralised or intermediate level administrative unit, there may be several SDMs, often related to the management models recognised in a particular policy framework.

Each literature review comprises: an introduction to the subject; a summary of the literature reviewed; an

analysis of the scope of literature available on the topic, identifying gaps and other key issues; an assessment of the state of current understanding of main lessons to date; and a summary of recommendations for improving understanding of service delivery concepts and practice. A bibliography is also included along with an executive summary of the most important pieces of literature.

This note is an attempt to summarise ideas and issues arising from a general but rapid review of literature on service delivery models and concepts. It aims to identify some of the key debates, terminologies and examples that may be relevant or offer insights into the issue of rural water service delivery in developing countries. The focus is placed on developing-country situations—although some relevant cases from high-income countries are included—and on other basic and infrastructure-dependent services that may be similar to those found in the water sector. These include rural roads, agricultural extension, health, education and electricity.

It is not possible with the scope of a brief review to identify common lessons around service provision across the globe and all sectors, since much of the work is reliant upon context and a host of factors that are likely to be specific to the country or sector in question. What once worked well in a given location

will not necessarily work well in another place or time. However, it is striking to note the similarities in the challenges faced in very different contexts (e.g. rural Finland and rural Africa), and in some of the policy prescriptions and solutions being considered.

This note is intended as *food-for-thought* to stimulate debate and motivate readers to look for ideas outside the water sector on key issues in service delivery such as accountability, decentralisation, community or user participation and private sector involvement. The note identifies some key issues based upon a tabulated summary of key dimensions or options in service delivery concepts, and an annotated bibliography. The summaries of the literature reviewed have been carefully selected and are intended to encourage further reading. All texts are referenced in the bibliography and where available, links have been included to the respective full versions.

Based upon a review of limited key literature (see the annotated bibliography below), Table 1 summarises some key dimensions, options or factors influencing service delivery concepts. It aims to contrast very different options (the left and right; see the *from* and *to* columns in Table 1) and to show some of the intermediate or alternative options found between the extremes. Some of the main factors in the service delivery models identified from the literature in this framework include:

- The degree of *functional* and/or *service-wise integration* or *separation*: in the water sector there are often many agencies involved due to the sectoral and functional separation of roles, making the institutional settings complex;
- The extent of *decentralisation*: establishing the role of local government in service delivery vis-à-vis other agencies;
- *Non-governmental involvement* in service delivery and the *role of communities*: these factors influence the role of the private and voluntary sectors and the degree of co-production where communities are directly involved in service provision;
- *Charges to users* (with links to financing): with a wide range of models and forms of subsidy;
- *Infrastructure/(appropriate) technology* approaches: from high to low cost; and
- *Political stability*, which sets the context for all development-related interventions.

Some common issues or lessons for the rural water sector in developing countries can be drawn from the annotated bibliography. The World Development Report emphasises *accountability* and the importance of *client power*, including lessons learnt on different types of delivery model (WDR, 2004). To illustrate, in Nicaragua, vouchers to promote services are distributed to increase the use of reproductive health services by female sex workers. The vouchers entitle the sex

workers to free services at selected for-profit, NGO, and public clinics. Loevinsohn & Harding (2005) analyse such *alternative delivery models* in health, including those based on *client power* through vouchers or franchising to achieve economies of scale. Overall, the World Development Report illustrates the importance of taking *holistic approaches* to service delivery and not focussing on a panacea. This is a message that resonates strongly with rural water supply experiences.

The Organisation for Economic Co-operation and Development report illustrates similar service delivery challenges faced by the rural water sector in Africa, but in very different contexts (OECD, 2010). It makes a case for *integrated planning* and service delivery that challenge unconsidered assessments which in turn try to isolate the rural water sector, both institutionally and in terms of resource flows. It challenges us to look for good examples of integrated (rural) district planning/delivery of water. The report highlights *co-production* which seems to go beyond just community involvement in managing individual systems and involves a much more external central role in local planning and resource allocation.

A parallel with issues in agricultural extension identified by Anderson and Feder (2004) is observed, particularly in the need for sustained *public subsidies* to maintain overall services at the level of systems (for recurrent costs) and institutional support (post-intervention/post-construction). Examples from rural areas in Europe illustrate the imperfect and weak markets in these areas with low profit incentives and need for some kind of (public) support to encourage other solutions—basically the *subsidy* issue in another form (Cambridge Policy Consultants, 2006). DFIDs insights on health and education question the efficacy/equality of a system based on user fees and again, raise the issue of how public subsidies can be exercised. Reading Martinot, Cabral and Mathur (2001) reminds us about affordability as a barrier to access given the high initial connection fees and costly infrastructure, and the role of financial subsidies or at

least alternative models to facilitate financing through, for example, local credit institutions. Such examples of local credit institutions include the microfinance institution, CIDRE in Bolivia, and the Community Development Fund approach in Ethiopia.

Burningham and Stankevich (2005) illustrate the importance of and need for financing to meet the *costs of maintenance*. According to the Global Annual Assessment of Sanitation and Drinking Water Report (GLAAS report), some 44% of all financing require-

ments for water supply is used for maintenance/ rehabilitation and not for new systems (that include more costly urban systems) (WHO, 2010). Other issues arising include the *role of donors* in pushing for (new) capital investment as well as the disregard and failure to address the direct and indirect costs associated with facilitating and sustaining CapManEx<sup>1</sup>. How similar in that respect is the rural water sector with similar capital intensive approaches as roads?

**TABLE 1: DIMENSIONS/OPTIONS IN SERVICE DELIVERY CONCEPTS**

Dimension	From	Via	To
Functional separation/integration	Integration of functions (to increased ownership and control).  Example: a large government ministry or agency that does everything in-house.		Separated roles (planning/policy, service providers, regulators etc.)  Examples: Separation happens because of a fiscal crisis, a major political change, or a developmental legacy of history (WDR, 2004). Separation, more often than not, is a common feature of privatisation processes.
Service-wise separation/integration	Sectoral approach (e.g. water, transport, education, health, etc.).		Combined/multiple services  Examples: Combined schools, health, adult learning and recreational centres, etc.; Involvement of other front-line staff in WASH monitoring activities (e.g. rural health workers)
Extent of decentralisation	Low/centralised. Economies of scale derived through serving larger territorial units and delivered by one central agency.  Example: In Costa Rica, prior to sector reforms in the early 2000's, technical support for rural water systems was provided by one centralised unit under the national agency, Acueductos y Alcantarillados (AyA).	Joint service delivery (e.g. multiple districts), 'local centralisation' or 're-centralisation' (see forms of cooperation in OECD, 2010, 69–70).  Examples: Local centralisation in Finland especially where district populations are very low; Closure/reduction of local (public and private) services in Canada over the past 20 years, putting in place health centres at regional levels (Halseth and Ryser, 2006).	High/decentralised. Place-based service delivery that is context specific.  Examples: Local government delivery of infrastructure in South Africa improved service provision in a short time, but decentralising social assistance in Romania weakened the ability and incentives of local councils to deliver cash transfers to the poor and was reversed (WDR, 2004).

(Continues) ►

<sup>1</sup> CapManEx is described as the expenditure on asset renewal, replacement and rehabilitation costs, which is based upon serviceability and risk criteria. CapManEx covers the work that goes beyond routine maintenance to repair and replace equipment in order to keep systems running. Accounting rules may guide or govern what is included under capital maintenance and the extent to which broad equivalence is achieved between charges for depreciation and expenditure on capital maintenance. Capital maintenance expenditures and potential revenue streams to pay those costs are critical to avoid the failures represented by haphazard system rehabilitation.

**TABLE 1: DIMENSIONS/OPTIONS IN SERVICE DELIVERY CONCEPTS**

Dimension	From	Via	To
Degree of non-governmental involvement	<p>Private. Reliance on markets to match supply and demand and competition between providers to promote efficiency and quality.</p> <p>Concessions to private sector service providers.</p>	<p>Third sector agencies/NGOs in service delivery (replacing local government where weak, missing, resources inadequate, etc.) and communities as service providers (co-production).</p> <p>Examples: contracting out primary health care after the civil war in Cambodia (WDR, 2004). In the UK, Housing Associations are a good example, often providing lower cost or social housing to the poor.</p>	Public service delivery
Community role	<p>Ask for and receive services.</p> <p>Long-arm of accountability: citizens hold their politicians and policymakers accountable for the services they receive.</p> <p>Short-arm of accountability: citizens 'monitor and discipline service providers' (WDR, 2004).</p>	Community participation (e.g. in planning, making choices).	<p>Communities as service providers.</p> <p>Example: El Salvador's Community-Managed Schools Program (Educo) gives parents' associations the right to hire and fire teachers (WDR, 2004).</p>
Charges	<p>Payments in reward for using services.</p> <p>Example: Mexico's Education, Health, and Nutrition Program (Progresa) gives cash to families if their children are enrolled in school and they regularly visit a clinic (WDR, 2004). Brazil has a similar programme (Bolsa Familiar).</p>	<p>Services provided free at point of use.</p> <p>Pay-as-you-use.</p> <p>Universal access/charges for all (through cross subsidies e.g. from urban to rural).</p>	<p>Large upfront access charges and regular subscription payments.</p> <p>Examples found in private health and education, but can also be the case in water (often with high connection charges, but low tariffs).</p>
Infrastructure (robustness)	<p>Bullet proof technology (that doesn't break down).</p> <p>Example: wind turbines for Ethiopia built to higher specifications than models for USA.</p>	Intermediate level technologies that users can partly maintain but sometimes require support.	Low-cost and simple technology (that users can maintain themselves).
Political instability and/or level of conflict	Fragile states: services provided on an ad-hoc basis through 'enforced' local government whether formal or otherwise (i.e. absence of central control/influence leads to local solutions).	Anti-developmental states— often autocratic where service provision is linked to political patronage systems.	Stable, pro-development states.

The selected texts have been ordered by suggested relevance to rural water services delivery issues. Many of the annotations include summarising frameworks that may be useful in helping to categorise and understand similar issues in rural water service delivery.

### 1. It's all about accountability

World Bank, 2003. *World Development Report 2004: making services work for poor people*. WA: World Bank & Oxford University Press.

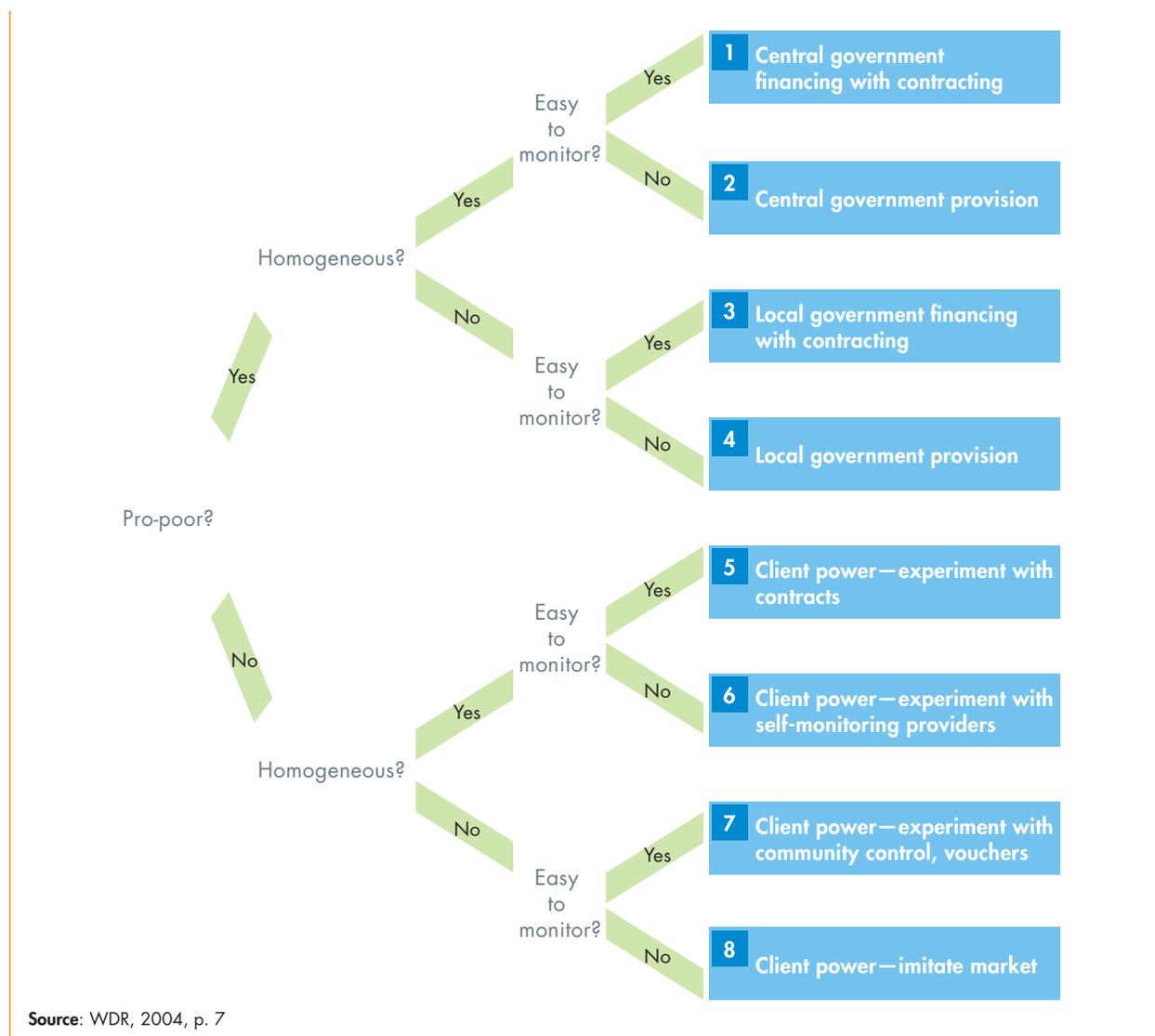
The World Development Report 2004 focused on service delivery and included a comprehensive 18-page summary highlighting the need to strengthen accountability across three key relationships (see Figure 1) in the service delivery chain, specifically between poor people and providers; poor people and policymakers; and policymakers and providers (the compact). These relationships constitute what are termed the long and short arms of accountability. As is the case in water, '...for various good reasons, society

has decided that [essential] service[s] will be provided not through a market transaction but through the government taking responsibility. That is, through the "long route" of accountability—by clients as citizens influencing policymakers, and policymakers influencing providers' (p. 6). However, '...when the relationships along this long route break down, service delivery fails (absentee teachers, leaking water pipes) and human development outcomes are poor' (p. 6). Contracting providers is often problematic as in water '...for many services, such as student learning or curative care, the policymaker may not be able to specify the nature of the service, much less impose penalties for underperformance of the contract. Teacher and health-worker absenteeism is often the result' (p. 6). Given the weaknesses in the long route of accountability, it is argued that service outcomes can be improved by strengthening the short route. This is facilitated by increasing the client's power over providers. School voucher schemes or scholarships in which schools receive a grant based on the number of girls they enrol '...enable clients to exert influence over providers through choice' (p. 6).

■ ■ ■ FIGURE 1: THE FRAMEWORK OF ACCOUNTABILITY RELATIONSHIPS



■ ■ ■ **FIGURE 2: EIGHT SIZES FIT ALL?**



The central idea proposed is that, ‘Increasing poor clients’ choice and participation in service delivery will help them monitor and discipline providers. Raising poor citizens’ voice, through the ballot box and widely available information, can increase their influence with policymakers—and reduce the diversion of public services to the non-poor for political patronage. By rewarding the effective delivery of services, and penalising the ineffective, policymakers can get providers to serve poor people better’ (p. 1). A widely cited example is that of education in Uganda where, prior to a media campaign, only 13% of funds were reaching schools. This was increased to over 80% post-campaign.

The report also makes an interesting argument relevant to the governance issues frequently headlined in the water sector. Focusing on health issues, the report suggests that ‘it is tempting to recommend a technical

solution that addresses the proximate cause of the problem. Why not give vitamin A supplements, de-worm schoolchildren, and train teachers better? Why not develop a “minimum package” of health interventions for everybody? Although each intervention is valuable, recommending them alone will not address the fundamental institutional problems that precluded their adoption in the first place. Lack of knowledge about the right technical solution is probably not the binding constraint. What is needed is a set of institutional arrangements that will give policymakers, providers, and citizens the incentives to adopt the solution and adapt it to local conditions’ (p. 11). Recognising that one size does not fit all, the report offers a rather interesting and useful eight-sizes-fit-all approach based on a range of criteria such as whether demands are heterogeneous or homogenous, the service is easy or hard to monitor, levels of corruption, etc. (see Figure 2).

## 2. Similar rural service delivery challenges in OECD countries

Organisation for Economic Co-operation and Development, 2010. *OECD Rural Policy Reviews: strategies to improve rural service delivery*. [pdf] Paris: OECD Publishing. Available at: <http://browse.oecdbookshop.org/oecd/pdfs/browseit/0410051E.PDF> [Accessed 25 August 2010].

This book addresses the rural service delivery challenge in OECD (i.e. higher-income) countries. It includes a review of the challenges of rural service delivery; a discussion on the different approaches to delivering public services in rural areas and the roles of innovation, co-design and co-delivery mechanisms in designing better approaches to service delivery; and offers a framework for service delivery involving public, private and voluntary provision (see Table 2 for classification cited). It is based upon a multi-year

**TABLE 2: CLASSIFICATION OF RURAL SERVICES IN SUPPLY AND DEMAND CONSIDERATIONS**

	Demand	Supply			Gaps between supply and demand emerge...
		Public Sector	Private Sector	Not-for-profit	
Distance	Depends on the type of service, frequency of use and availability of transport (public and private). In some cases, proximity is indispensable for meeting demand; in others a certain distance to be travelled becomes an acceptable condition.	Decentralized in the past. The service now tends to follow a profitability and concentration approach.	Spatial concentration of service aimed at the achievement of sufficient critical mass for an economic balance.	For certain services, voluntary resources and associations make it possible to maintain at local level.	When the service sought by the consumer is to be found at a distance beyond the acceptable limit for the consumer due to the cost, time travelling, or lack of access to adequate means of transport. In general, the geographical distribution of services does not respond to consumer expectations.
Adaptability	This category is linked to the trends of modern life. Demand should be interpreted with a view to identifying the relevant level of adaptability. E.g. regularity of demand, demand in terms of timetables.	Rigidity of structures. Special nature of the service reproducing the urban model. Nevertheless, there is search adaptability when the decision-making capacity is closer to the area.	Mobility of certain services (especially mobile traders and weekly markets; and occasionally mobile banks).	Greater adaptability, personalization and consideration of particular demands.	If service provision is not capable of meeting the needs of the users in terms of the diversity of proposed services, modalities made available, timetables, rigidity in the design and use of the structure or a specialized approach (the only response to a scarcely populated area is the discontinuation of the service).
Quality	Established according to recognized standards and accepted by the community on the basis of comparisons with the outside world; it is also related to the human qualities of a service such as the relationship between those concerned.	Search for a standard quality. New mechanisms for taking consumers' demands into account. Quality can remain low in monopolistic situations where there are no mechanisms through which consumers can exert pressure.	Adaptation to quality standards, but even more to diversification as a result of competition. Lack of involvement of users. The growing precariousness of job security with negative repercussions on the quality of services.	Extremely variable quality depending on the level of recognition, available resources, etc. More than the structure, quality depends on the level of personal involvement of those providing the service. Effort to involve suppliers and consumers.	When there is no adaptation to the content of the service, when the opinion of consumers is not taken into consideration and when a scattered demand makes it impossible to provide a service of acceptable quality.

Source: Adapted from the Leader European Observatory, OECD, p. 22

project by the OECD Secretariat and a series of OECD rural development conferences where service delivery was addressed as a key issue. Despite the very different contexts, and often different services, there appear to be many similarities in the problems and solutions faced in rural areas in lower-income countries, as well as in the debates. In the context of the current economic recession, it is considered necessary '...to make a strong case for continued public support and to develop alternate means for providing the services that are vital for economic development' (p. 11).

The 'New Rural Paradigm' (p. 31) described in the report calls for '...changes in the conception and implementation of rural policy from a traditional, sector-based approach to one that is place-based' (p. 32). Key elements include local development strategy, greater focus on local assets and knowledge, and a collective/negotiated governance approach involving national, regional and local government working with other stakeholders.

'...Based on preliminary research, approaches with the citizens at the heart of service delivery are emerging as the most interesting and successful' (p. 90). Current practice in OECD countries also suggests a subscription to standard and good developmental practice in participation and community management. The involvement of the voluntary sector in service delivery has many parallels to community management in water for example. It is noted that '... traditional service delivery approaches can be too expensive or inappropriate' (p. 94). Co-production is defined as an umbrella term that covers '...co-design, co-creation, co-delivery, co-management, co-decision, co-evaluation, which all reflect the different stages of citizen involvement and the different types of input' (p. 105).

The report concludes that '...there is scope for the wider use of public management tools such as co-design and co-delivery schemes in rural public service delivery strategies. Rural areas are challenged by typical service delivery approaches because of low population density and high transportation costs, but they may have an advantage in adopting co-design and co-delivery as a service delivery strategy. The population in rural areas is often prepared to become engaged in local policy discussions and often shares a common agenda. Consequently, it may be easier to reach agreement on how services are to be provided than in more complex urban societies' (p. 107).

As highlighted in the World Development Report 2004 and many other reports, additional *innovations* reported 'focus on better access to and transparency of information so that citizens can compare services

and make informed decisions, and hold government to account' (OECD, p. 90).

### 3. The challenges of providing information to farmers

Anderson, J.R., and Feder, G., 2004. Agricultural extension: good intentions and hard realities. In: *The World Bank Research Observer*, 19 (1), pp. 41–60.

Agricultural extension experiences may well be of some value in examining service delivery in rural water. In particular, the sustainability of extension systems might have some similar characteristics to sustaining water providers at the local level through support services. Fortunately, due to the nature of the service, rural water appears rather simpler than providing information to farmers. The complexity of this task relates to the dynamic nature of the issues and the huge local variability in for example crops, soils, markets, etc. This paper points out that agricultural extension operations have been 'one of the largest institutional development efforts the world has ever known. Hundreds of thousands of technicians have been trained, and hundreds of millions of farmers have had contact with extension services' (p. 53). The results are not encouraging and in fact, the complexity of measuring results appears to support a leap of faith. The authors conclude that 'the difficulty of attributing impact weakens [national] political support, and leading to problems of fiscal sustainability' (p. 55). The authors go on to suggest that this is also ironically one of the reasons why international development agencies have bought into agricultural extension so heavily.

The paper reviews different models for providing extension advice (see also Table 3). Innovations on the traditional government service delivery model include the training and visit approach (tried at scale in 70 countries), decentralisation, fee for service and privatised extension and farmer field schools. The paper concludes with some optimism on locally decentralised delivery and private sector provision, while acknowledging that extension will remain publicly funded in poorer countries. Key issues centre on accountability problems (farmers generally do not pay for information so crafting accountability mechanisms is complex), and fiscal sustainability of systems when aid support is withdrawn. '...More than 70% of extension projects in a sample of World Bank-supported operations faced unlikely or uncertain sustainability' (p. 48). Decentralisation aims to address the accountability deficit but has faced problems including political interference, misuse of staff for other activities, reduced economies of scale and higher costs. Paying for service solves the

**TABLE 3: SOME ALTERNATIVES FOR PUBLIC-PRIVATE FINANCING AND PROVISION OF EXTENSION SERVICES**

Service provision	Public	Finance Provision	
		Private (Farmers)	Other Private
Public	Traditional extension	Free-for-service extension	Contracts with public institutions
Private	Subsidies to extension service providers	Commercial advisory services	Information provided with sale of inputs
	Publicly financed contracts for extension services	Sale of newspapers, magazines, other information products	Extension provided to contract growers  Advertising in newspapers, radio, television, magazines

Source: Alex, Zijp and Byerlee, 2002, cited in Anderson and Feder, 2004

accountability dilemma, but requires subsidies to ensure that poorer farmers are not excluded.

#### 4. Maintaining roads is more important than new construction

Burningham, S., and Stankevich, N., 2005. *Why road maintenance is important and how to get it done*. World Bank Transport Note, 4. [pdf] WA: World Bank. Available at: Home/Topics/Transport/Knowledge Resources/Transport Notes Series [http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1231943010251/TRN4\\_Road\\_Maintenance.pdf](http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1231943010251/TRN4_Road_Maintenance.pdf).

This brief concludes, ‘...if money is short—and it usually is—there’s only one rational course of action: maintain existing roads before funding new ones, make sure it is done today, and even every day. Because tomorrow, it will be much more expensive’ (p. 6). Achieving sustainable road maintenance with scarce public resources is reported to be a major challenge with many countries only spending 20–50% of what is needed on maintenance. Postponing road maintenance has high direct (i.e. repairs or replacement cost more) and indirect costs (i.e. reduced use and benefits) down the line. ‘...If road defects are repaired promptly, the cost is usually modest. If defects are neglected, an entire road section may fail completely, requiring full reconstruction at three times or more the cost, on average, of maintenance costs’ (p. 1). The South African National Road Agency Ltd. (SANRAL) estimates that repair costs rise to six times the amount of maintenance costs after three years of neglect, and to 18 times after five years of neglect. To avoid such escalating costs, SANRAL first ‘allocate[s] its available funding resources to ideal maintenance actions (e.g. reseals and overlays), and thereafter to

more extensive maintenance actions (e.g. rehabilitation), and finally to new construction (p. 1). Similar to the case in rural water, it is noted that ‘many countries have tended to favor new construction, rehabilitation, or reconstruction of roads over maintenance. This has led to a steady increase in the backlog of road repairs and a loss of development impact’ (p. 1). The role of donors is also complex. ‘Much of the capital cost of road construction is financed by donor funds, with low perceived cost to the country but high real costs, while maintenance is funded locally, requiring difficult and unpopular tax mobilization’ (p.1). It is also noted that donors have become increasingly involved in road maintenance although this in itself may not be sustainable. As happens in rural water supply, there are also concerns raised about ownership of roads and discussions around roles and responsibilities. In some cases, roads are also just handed over to communities. Recommended good practice includes the balancing of investment in construction, rehabilitation and management.

#### 5. Examples from rural Europe: not so different?

Cambridge Policy Consultants, 2006. *Service delivery in rural areas: good practice in European countries*. [pdf] Cambridge: Commission for Rural Communities. Available at: <http://www.ruralcommunities.gov.uk/files/European%20report%20full.pdf> [Accessed 25 August 2010].

This report includes several interesting examples on service delivery in rural areas drawn from rural Europe (Denmark, Finland, Germany, France and Sweden). As in the case of Finland: ‘Since the mid 1990s the national policy-makers have started to question what will happen in the more remote rural areas where the private sector is not interested in taking over service provision due to weak markets and

at the same time the local municipality is unable to continue to provide the existing service (at all or at the same level)' (p. 13). This is driven by the need to limit taxation and reduced budgets. At around the same time, 'the village action movement started to become more structured and organised where informal groups evolved into formal development companies and co-operatives, undertaking economic activity themselves, giving local control to service delivery' (p. 13). The village movement has 'changed from being a tool to demand services from the government to a means of activating the community itself to take over the responsibility of providing (some of) these services themselves' (p. 13).

## 6. Contracting NGOs to deliver primary health services

Loevinsohn, B., and Harding, A., 2005. Buying results? Contracting for health service delivery in developing countries. In: *The Lancet*, 366, pp. 676–81.

This article reviews available studies on the experience of contracting to provide primary health care services. After summarising the potential pros and cons of contracting to non-state entities (including whether contracting is scalable and sustainable), it includes a useful typology of different service delivery arrangements (see Table 4). The typology identifies eight models (government services, inter-government agreements, management contracts, service delivery contracts, grants to private sector, vouchers, franchising and private sector services) and is classified based on the initiator (defines services and areas); selector (chooses provider); manager; the provider of infrastructure; and the source of financing. The review only included NGOs as providers since the *for-profit* schemes failed to meet the study criteria—one of which, ironically, demanded for the adequate provision for monitoring of outcomes. Overall, the authors write that they are positive about contracting out to NGOs, noting significant improvements in all cases. The authors also conclude that such contracting is scalable, more cost effective than direct government provision and can increase coverage in poor, remote areas. Even where contract management was found to be poor due to capacity constraints, this was said not to have prevented improvements in service delivery. The authors further suggest the need to maximise the autonomy that contractors are given.

Sustainability remains a key concern, especially because of the reported success, and particularly where donors played key initiating roles. All studies focused on primary care and nutrition with outputs

that were easier to measure than for example, in-patient care. A key issue that was also highlighted is in the difference observed between contracting NGOs and for-profit providers, which is common in developed and middle-income health systems but not in low-income countries. The authors explain that contracting services does not necessarily translate to reduced expenditures. Such approaches can even provide a way to keep '...publicly funded health care relevant' (p. 680). Such approaches are especially worth investigating where rapid improvements in service delivery are required (e.g. to meet MDG targets).

## 7. Differences with health and education

Bennett, S. and Gilson, L., 2001. *Health financing: designing and implementing pro-poor policies*, DFID Health Systems Resource Centre. [online]. Available at: Home/Publications/Health Sector Financing [http://www.dfidhealthrc.org/publications/health\\_sector\\_financing/Health\\_financing\\_pro-poor.pdf](http://www.dfidhealthrc.org/publications/health_sector_financing/Health_financing_pro-poor.pdf) [Accessed 25 August 2010].

In other sectors, there are different policy conclusions that offer insight into the current wisdom in the water sector. User fees are considered an inequitable way to fund health care and a barrier to use. In education, users may even be paid for using the services as in the case of families rewarded for placing children in school. Removing fees is shown to have increased utilisation of health services, although this can only be maintained if there is sustained and increased funding to finance the increased uptake of services.

In water, user fees and contributions are widely accepted, although they have been widely cited as problems for countries like South Africa and Tanzania where there is free access to water. User fees are considered to provide a useful means to improve demand-responsiveness, and generate increased ownership by communities, thus leading to improved operations and maintenance.

In health, some aid agencies are also reported to be willing to fund recurrent expenditures such as salaries for health professionals so that services can be sustained. But aid funding of such costs in the water sector is rather taboo and only likely to occur under budget support/SWAPs. It is challenging to understand this aspect since supporting recurrent funding could potentially help avoid losses from investments made in infrastructure and when systems break down due to inadequate capacity to support service delivery.

**TABLE 4: ARRANGEMENTS OF SERVICE DELIVERY**

	<b>Initiator (defines services and area)</b>	<b>Selector (who chooses provider)</b>	<b>Manager</b>	<b>Production infrastruc- ture</b>	<b>Source of financing</b>	<b>Example</b>
1. Government services	Government	Government	Government	Government	Government†	Government primary health care centres
2. Inter-government agreements	Government-1*	Government-1	Government-2*	Government-2*	Government-1 †	Transfer of funds from federal to provincial governments
3. Management contracts	Government	Government	Private sector	Government	Government†	Government hires a private sector manager to manage existing Government health services
4. Service delivery contracts	Government	Government	Private sector	Private sector	Government†	Government hires NGO to provide services where none currently exist
5. Grants to private sector	Private sector	Government or donor	Private sector	Private sector	Government	NGOs submit proposals to Government for needs identified by community or NGO
6. Vouchers	Government	Consumer	Private sector	Private sector	Government	Female sex workers are provided vouchers for curative care which they can redeem at practitioners of their choice
7. Franchising	Private sector	Consumer	Private sector	Private sector	Consumer (+/- subsidy from Government or donor)	Private practitioners join franchise network providing reproductive health services
8. Private sector services	Private sector	Consumer	Private sector	Private sector	Consumer or NGO/donor	1. NGO establishes health services in slum areas using its own funds  2. For-profit providers establish private clinic

NGO = Non-governmental organizations, +- = with or without. \*Government-1 = higher level of government, "Government-2 = local level of government. †Can be supplemented by formal or informal user-charges.

**Source:** Loevinsohn and Harding, 2005

## 8. Basic energy services

Martinot, E., Cabraal, A., and Mathur, S., 2001. World Bank/GEF solar home system projects: experiences and lessons learned 1993–2000. In: *Renewable and sustainable energy reviews*, 5, pp. 39–57.

This paper reviews the implementation of 12 pilot projects to provide energy services to off-grid rural households in developing countries by enhancing markets for solar home systems and removing barriers to their dissemination. These projects were all too new at the time of writing to document full experiences in their implementation or the sustainability of home solar systems. Nevertheless there are some possible parallels with rural water that make the cases interesting. The systems provide basic energy services for lighting, radio, television and other small appliances. By the year 2000, 500,000 households were reported to have already been benefiting from these services. Solar home systems gathered interest in the 1990s, as the technology developed and reduced in cost while ‘...population growth [was] outpacing the ability of electricity utilities to extend rural electricity grids and developing countries [were] increasingly recognising the economic difficulties of achieving full grid-based rural electrification’ (p. 4). Solar became an option for ‘least-cost rural electrification’ (p. 4) to supplement grid-based electrification.

The projects reviewed are reported to have been specifically designed to overcome barriers to ‘wide-spread and accelerated dissemination’ (p. 4) such as lack of: an established market, successful business models, consumer financing and business financing and skills, along with affordability issues, high initial and transaction costs, uncertain technologies, uncertain or unrealistic grid expansion plans and other policy constraints. Some of these barriers resemble those faced by self-supply or household-

based water services. The design features to address these barriers include: pilot private-sector and NGO delivery models; pilot consumer credit delivery mechanisms; pay first cost subsidies; supporting policy development and capacity; new codes and standards including certification, testing and enforcement institutions; and consumer awareness programmes.

Private sector delivery models tested include dealer sales where a local dealer buys systems and then sells them on to households, and energy-service companies (ESCOs) where the system is owned by the ESCO who assumes responsibility for its service in return for a monthly fee (p. 6). ESCOs are said to have worked in some places but are not suitable in others such as China due to lack of regulation. One firm failed due to the high costs of monthly collections among highly dispersed and remote rural populations where ‘...the firm did not have sufficient rural infrastructure and standing in rural communities to handle collections effectively and efficiently’ (p. 7). Overall, ‘lessons from early experience suggest that solar home system delivery firms face a myriad of difficulties operating in rural areas. These low-margin firms must develop good business models and need flexibility from projects in doing so. Firms with rural experience and/or distribution infrastructure will do better. For regulated ‘...energy-service concessions, a government agency at an appropriate level must learn to serve as an effective regulator’ (p. 9). To address initial high costs, consumer credit and subsidies have been the focus of much piloting. These household systems have a high initial cost compared to the alternatives, as do household level water supplies. Dealer credit systems can work but ‘building a rural service infrastructure with technicians is a different thing from building a rural credit delivery and collection infrastructure said the suppliers’ (p. 10). Micro-finance organisations provide an important alternative.

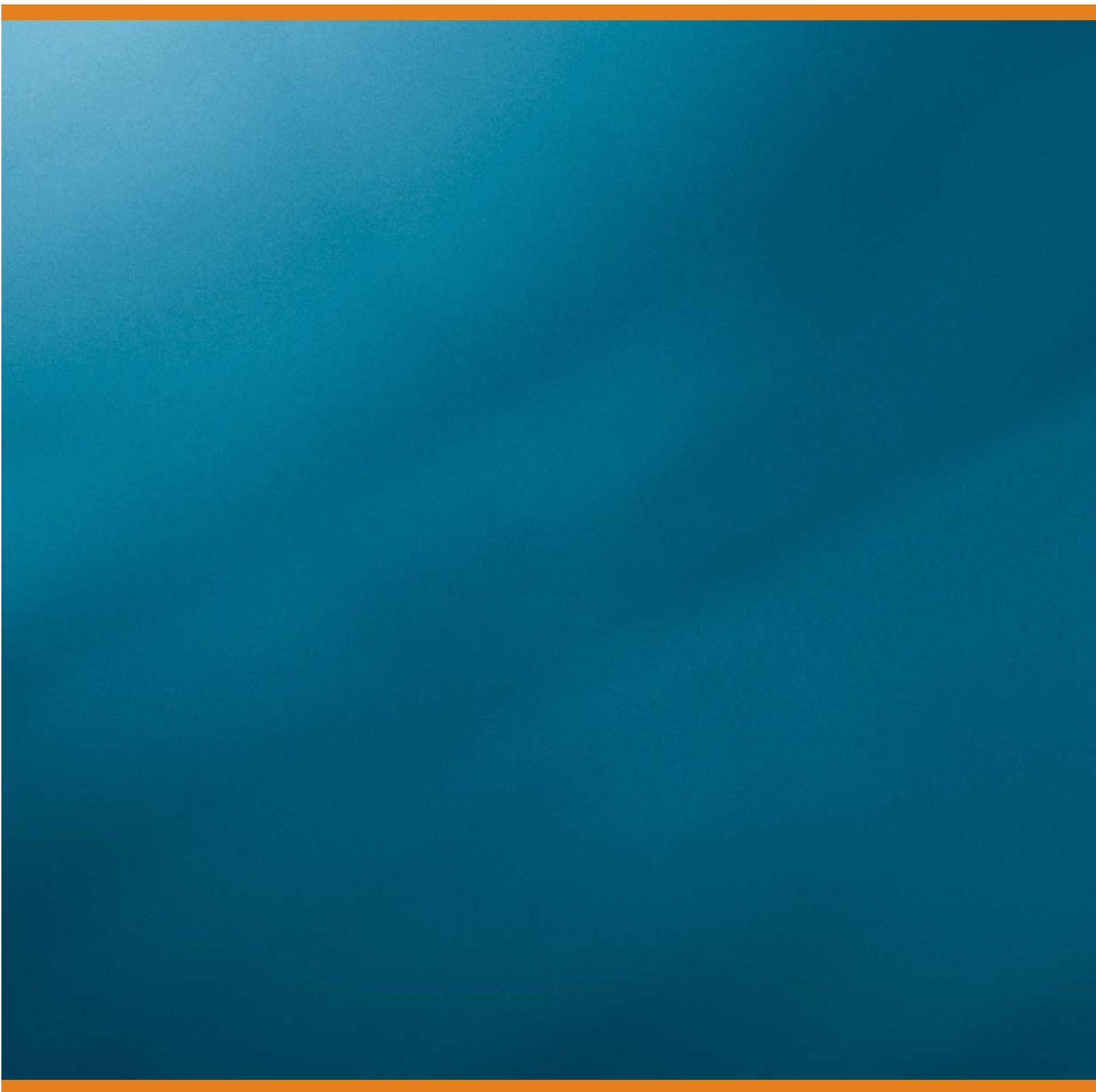
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## About Triple-S

Triple-S (Sustainable Services at Scale) is an initiative to promote 'water services that last' by encouraging a shift in approach to rural water supply—from one that focuses on implementing infrastructure projects to one that aims at delivering a reliable and indefinite service. The initiative is managed by IRC International Water and Sanitation Centre in the Netherlands in collaboration with agencies in different countries and with funding from the Bill & Melinda Gates Foundation.

## About *Brief review of service delivery concepts—A literature review*

This note summarises ideas and issues arising from a general but rapid review of literature on service delivery models and concepts. It aims to identify some of the key debates, terminologies and examples that may be relevant or offer insights into the issue of rural water service delivery in developing countries. This note is intended as food-for-thought to stimulate debate and motivate readers to look for ideas outside the water sector on key issues in service delivery such as accountability, decentralisation, community or user participation and private sector involvement. The note identifies some key issues based upon a tabulated summary of key dimensions or options in service delivery concepts, and an annotated bibliography.

For more information and access to country reports, other literature reviews, and the synthesis document please visit <http://www.waterservicesthatlast.org>.

**triple-s**  
■ ■ ■ WATER SERVICES THAT LAST