



FINANCING WATER AND SANITATION IN DEVELOPING COUNTRIES: THE CONTRIBUTION OF EXTERNAL AID

Highlights

- Aid was instrumental in encouraging progress toward the MDG targets on water supply and sanitation. Since 1990, drinking water and sanitation coverage in the developing world has increased by 16% and 20% respectively. However, much remains to be done. Drinking water coverage averages only 63% in LDCs; and much of sub-Saharan Africa and several of the most populous Asian countries remain off track in meeting the MDG sanitation target.
- In 2010-11, total annual average aid commitments to water and sanitation amounted to **USD 7.6 billion**, representing **6% of total sector allocable aid**. The largest bilateral providers in 2010-11 were Japan (on average USD 1.8 billion per year), Germany (USD 868 million) and the United States (USD 442 million). IDA provided USD 1.3 billion and the EU Institutions USD 538 million. While aid to water and sanitation has increased in recent years, funding remains insufficient considering the needs.
- In 2010-11, aid to water and sanitation targeted regions most in need of improved access to water and sanitation: **Sub-Saharan Africa received 25% of total aid to the sector, and South and Central Asia 23%**. The poorest countries (LDCs and other LICs) received **33%** of total aid to the sector.
- Of total DAC members' aid to this sector in 2010-11, water supply activities represented **19%**, sanitation **18%**, and combined water supply and sanitation activities **42%**; the remaining **21%** consisted of sector budget support, contributions to funds managed by international organisations, waste management and education activities.

This note is produced in the framework of the OECD Horizontal Programme on Water (www.oecd.org/water). It presents data on aid flows and other, non-concessional, development finance for water supply and sanitation from members of the OECD Development Assistance Committee (DAC), non-DAC providers of development assistance, and multilateral agencies including the World Bank, regional development banks, UN and other agencies. It also examines results achieved in the water and sanitation sector and lessons learned from recent evaluations.

Trends in aid to water

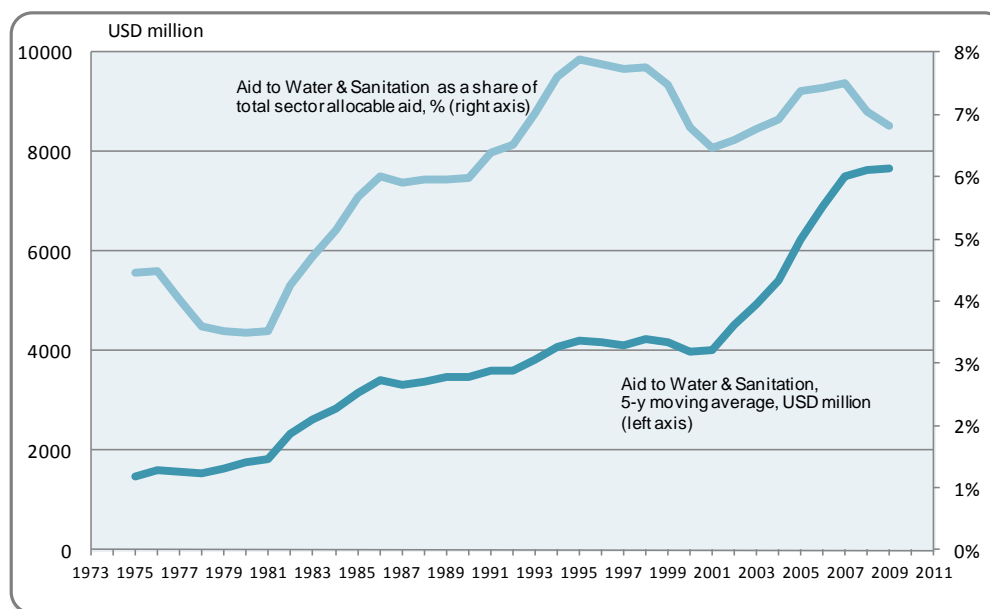
Aid for water and sanitation doubled over the International Drinking Water Supply and Sanitation Decade (1980 - 1989) and has nearly doubled again since 2002. The first rise reflected an increasing share of aid to the sector; the more recent rise reflected an increase in the overall volume of aid. In 2010-11, DAC countries' bilateral annual aid commitments to the water and sanitation sector rose to **USD 4.9 billion** (Table 1). Taking into account non-DAC

countries' aid flows and multilateral agencies' concessional outflows (assimilated to ODA), the total was **USD 7.6 billion**.

Rising commitments for the water supply and sanitation sector will translate into disbursements in the coming years (spending on some multi-annual commitments is spread over several subsequent years). Disbursements lagged the rise in commitments over the period 2002-11, but still reached **USD 6 billion** per year in 2010-11.

Chart 1. Trends in aid to water and sanitation

1973-2011, 5-year moving average commitments, constant 2010 prices



Rising levels of aid for water and sanitation have helped achieve remarkable results. The Millennium Development Goal (MDG) targets were to halve the share of the population without access to an improved water supply or adequate sanitation. According to UNICEF and WHO, the water target has been reached five years ahead of time: the number of people using improved drinking water sources reached 6.1 billion in 2010, up by over 2 billion since 1990. It should be noted, however, that an improved drinking water source may not necessarily provide safe drinking water. Much remains to be done, with benefits unevenly distributed. Eleven per cent of the global population – 783 million people and four out of ten people in Sub-Saharan Africa – remain without access to an improved source of drinking water. Rural areas are still behind cities in water access (81% vs. 96%). With respect to sanitation, coverage in developing regions increased from 36% in 1990 to 56% in 2010, but this is still well short of the 2015 target of 71%. Four out of ten people who have gained access to improved facilities since 1990 live in China or India. Despite progress, almost half of the developing world's population – 2.5 billion – still lack access to improved sanitation facilities. Many sub-Saharan countries and several of the most populous regions in Asia remain off track in meeting the MDG sanitation target.

Main providers of aid to the water and sanitation sector

Japan is the largest provider of assistance for water and sanitation, accounting for 23% of total aid in the sector for the period 2010-11. It is followed by the World Bank's IDA (17%), Germany (11%), the EU institutions (7%) and the United States (6%). Other countries that have significantly increased their aid to the sector in recent years include Switzerland, Australia and Finland. Among those providing aid for water and sanitation, the UN Economic Commission for Europe (UNECE) and the OPEC Fund for International Development (OFID), respectively with 20% and 18%, extended the highest proportion of their aid to the sector.

Table 1. Aid to water and sanitation by provider

2006-11, bilateral ODA and multilateral concessional flows, annual averages, constant 2010 prices

	Commitments			% of sector allocable aid			Disbursements	
	avg. 2006-07 USD million	avg. 2008-09 USD million	avg. 2010-11 USD million	avg. 2006-07	avg. 2008-09	avg. 2010-11	avg. 2008-09 USD million	avg. 2010-11 USD million
Australia	19	57	206	1	3	7	36	185
Austria	24	28	21	7	8	6	19	19
Belgium	84	78	57	11	6	5	44	69
Canada	25	67	29	1	2	1	57	46
Denmark	101	90	111	11	8	8	93	113
Finland	41	50	105	10	7	13	28	35
France	336	541	314	6	9	5	218	296
Germany	568	816	868	9	10	9	543	623
Greece	2	2	0	1	1	0	2	0
Ireland	17	19	10	4	4	3	19	10
Italy	58	104	42	8	13	9	24	26
Japan	2047	2408	1751	19	19	13	1533	1658
Korea	71	180	222	10	12	14	50	65
Luxembourg	13	21	20	8	11	12	21	20
Netherlands	433	268	123	11	7	3	254	212
New Zealand	3	1	8	2	1	4	3	3
Norway	37	52	31	2	2	1	44	35
Portugal	1	0	1	0	0	0	0	1
Spain	86	561	227	4	18	9	517	233
Sweden	64	53	53	4	3	3	81	53
Switzerland	48	44	165	6	6	15	50	83
United Kingdom	134	242	50	4	5	1	114	161
United States	665	666	442	4	3	2	261	390
Total DAC countries	4877	6349	4858	8	8	6	4010	4337
Kuwait (KFAED)	..	..	55	..	..	7	..	43
United Arab Emirates	..	147	24	..	8	5	54	27
Other bilateral	..	147	78	..	12	6	..	70
AfDF	372	289	243	18	11	14	194	173
Arab Fund (AFESD)	..	100	53	..	11	5	152	88
AsDF	280	204	285	16	8	13	..	167
EU institutions	652	332	538	6	3	5	480	467
GEF	..	..	13	..	..	2	..	..
IDA	913	679	1291	8	5	9	621	647
IDB Sp.Fund	51	29	58	9	5	10	31	47
IFAD	7	1	4	1	0	1	..	..
Isl.Dev Bank	..	..	60	..	..	16	..	..
Nordic Dev.Fund	..	..	7	..	..	13	..	5
OFID	..	47	54	..	8	18	6	26
UNDP	2	4	3	0	1	1	5	3
UNECE	..	1	2	..	9	20	2	2
UNICEF	37	44	35	6	6	5	44	35
Total multilateral agencies	2312	1731	2647	9	5	8	1535	1660
Total	7189	8080	7583	8	7	6	5545	6067

Notes: Figures for **OFID** in 2008-09 refer to 2009 only. Figures for the **Islamic Development Bank** in 2010-11 refer to 2010 only. Disbursement figures for the **Nordic Development Fund** in 2010-11 refer to 2011 only. Figures for **UNICEF** represent only a portion of its expenditures for its water, sanitation and hygiene programme (WASH). Excluded are cross-cutting water and sanitation expenditures that fall outside the DAC water sector, e.g. under aid to the environment, or administrative costs. **General budget support** is not taken into account in the above figures. **Sector budget support** for water and sanitation is however included. In addition to the DAC countries shown, the EU is a full member of the DAC.

DAC countries' total efforts for water and sanitation

Figures for DAC countries in Table 1 refer to their bilateral ODA. In addition to undertaking bilateral activities in the water and sanitation sector, DAC countries also contribute to multilateral agencies active in the water sector. Imputed multilateral contributions are calculated to assess the portion of DAC countries' core contributions to multilateral organisations that is allocated to water and sanitation. This offers a more complete picture of DAC countries' total efforts.

In total, it is estimated that **USD 1.6 billion** of DAC countries' core contributions to the multilateral system in 2010-11 were in support of water and sanitation (USD 668 million for the EU institutions, and USD 562 million for

IDA). Adding in their multilateral contributions does not greatly affect countries' rankings in terms of aid to the water sector with Japan, Germany and the United States still topping the list.

Table 2. DAC countries' bilateral and multilateral ODA to water and sanitation

2010-11 annual average commitments, USD million, constant 2010 prices

	Bilateral contributions	Imputed multilateral contributions				Total, imputed multilateral contributions	Total contributions (bilateral + imputed multilateral)
		Through regional banks	Through IDA	Through EU institutions	Through UN agencies		
Australia	205.8	9.1	10.3	0.0	1.3	20.7	226.5
Austria	21.4	6.0	10.3	15.9	0.4	32.6	54.0
Belgium	56.9	6.0	10.2	26.1	1.6	43.9	100.8
Canada	29.1	16.5	25.2	0.0	1.9	43.6	72.7
Denmark	111.1	3.5	6.0	14.2	2.0	25.7	136.8
Finland	105.0	4.1	4.5	10.5	1.3	20.4	125.4
France	313.8	23.0	38.1	122.5	1.9	185.5	499.3
Germany	867.6	31.5	71.2	141.7	2.9	247.3	1114.9
Greece	0.1	0.0	0.0	14.9	0.0	15.0	15.1
Ireland	10.4	0.8	1.6	7.6	0.5	10.6	21.0
Italy	42.4	8.9	18.1	90.9	0.8	118.7	161.1
Japan	1750.9	88.1	90.5	0.0	3.2	181.8	1932.8
Korea	222.5	6.3	5.1	0.0	0.2	11.6	234.0
Luxembourg	20.5	0.3	1.2	1.7	0.3	3.4	23.9
Netherlands	122.5	0.0	17.6	32.5	3.1	53.2	175.7
New Zealand	7.7	0.0	0.9	0.0	0.2	1.1	8.8
Norway	31.3	0.6	9.5	0.0	3.8	13.8	45.1
Portugal	0.8	1.7	1.4	9.9	0.0	13.0	13.8
Spain	227.3	7.6	17.8	58.9	1.5	85.8	313.1
Sweden	53.2	3.4	20.2	19.5	4.3	47.4	100.6
Switzerland	164.7	6.4	16.0	0.0	1.5	23.8	188.5
United Kingdom	50.4	33.5	101.7	101.1	3.9	240.2	290.6
United States	442.4	29.6	84.5	0.0	6.8	120.9	563.3
Total DAC countries	4857.9	286.8	561.6	668.0	43.3	1559.8	6417.6

Note: The share of each multilateral organisation's outflows allocated to water in total outflows (e.g. 6.84% for IDA) was applied to countries' core contributions to each organisation to derive their "imputed multilateral contributions". Resulting figures are estimates. See methodology at www.oecd.org/dac/stats/water.

Aid modalities in the water sector

A new feature in the data starting with 2010 is the introduction of new types of aid to better characterise bilateral aid flows by identifying the modalities of their delivery. In 2010-11, the distribution of DAC members' bilateral flows in the water sector by aid modality was as follows:

- **80%** of aid flows in the water sector were extended in the form of **projects** (mainly investment projects);
- **6%** were allocated through **sector budget support** mainly by the EU institutions;
- **6%** through technical assistance;
- **5%** through pooled contributions to **specific purpose programmes managed by international organisations** e.g. Inter-American Development Bank Water and Sanitation Fund, UN Habitat Trust Fund for Water and Sanitation, World Bank Water and Sanitation Programme;
- **2%** through pooled contributions to basket funds.

Aid to water and sanitation is predominantly in the form of investment projects. The EU, Germany, the World Bank and Australia are among those providing the largest share of sector budget support and pooled funds for water and sanitation.

Geographical targeting of resources

Overall, in 2010-11, aid to water and sanitation targeted regions most in need: sub-Saharan Africa received 25% of total aid to the sector, and South and Central Asia, 23%. The poorest countries (LDCs and other LICs) received one third (33%). However, funds are concentrated in a relatively small number of countries: the top ten recipients represented 39% of total financing to the sector (Table 3).

Table 3. Main aid providers and recipients in the water and sanitation sector

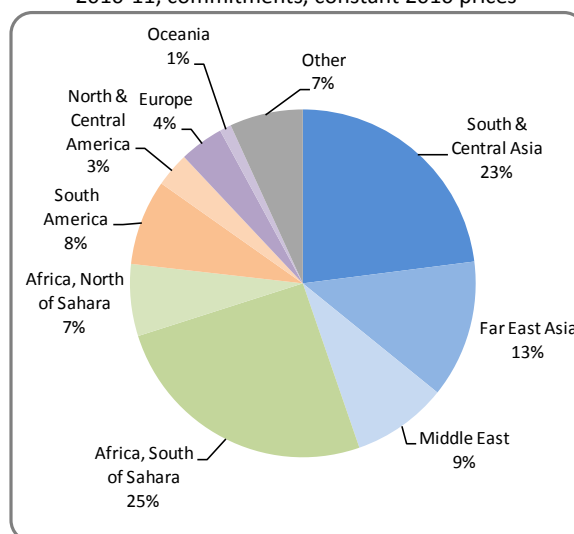
2010-11 average commitments, USD million, constant 2010 prices

	Japan	IDA	Germany	EU institutions	United States	Other donors	All donors	% of aid to water to all recipients
Vietnam	33.2	304.1	26.9	0.0	0.0	119.9	484.1	6%
India	193.3	267.0	3.8	0.0	0.8	17.4	482.3	6%
Bangladesh	106.7	219.9	0.0	0.0	1.1	152.5	480.2	6%
Iraq	235.7	0.0	0.1	10.3	51.6	4.4	302.0	4%
Brazil	232.1	0.0	67.1	0.0	0.3	1.9	301.4	4%
Morocco	190.0	0.0	7.7	0.0	0.2	78.3	276.3	4%
Jordan	20.1	0.0	19.8	6.6	147.4	1.8	195.8	3%
Sri Lanka	111.4	0.0	0.8	0.0	1.5	71.2	184.9	2%
China	7.3	0.0	138.6	0.0	0.3	17.1	163.3	2%
Kenya	22.2	0.0	35.8	0.0	6.2	98.9	163.2	2%
Indonesia	28.2	0.0	0.3	0.0	9.4	120.8	158.6	2%
Turkey	99.2	0.0	44.6	0.0	0.0	0.1	143.9	2%
Peru	58.7	0.0	58.5	0.0	0.6	23.8	141.6	2%
Tanzania	5.1	6.3	30.9	0.0	16.7	75.4	134.5	2%
Egypt	1.6	0.0	10.4	79.5	1.3	30.2	123.0	2%
Other recipients	406.3	493.8	422.0	441.5	204.9	1879.8	3848.3	51%
Total amount	1750.9	1291.2	867.6	537.8	442.4	2693.4	7583.3	100%
% of aid to water from all donors	23%	17%	11%	7%	6%	36%	100%	

Overall, in 2010-11, aid to water and sanitation targeted regions most in need of improved access to water and sanitation (chart 3).

Chart 3. Distribution of aid to water and sanitation by region

2010-11, commitments, constant 2010 prices



According to the 2012 MDG report, Sub-Saharan Africa nearly doubled the number of people using an improved drinking water source between 1990 and 2010; and coverage increased from 49% to 61%. Southern Asia and Eastern Asia increased coverage by 18% and 23%, respectively; South-Eastern Asia, 17%; Latin America and Caribbean, 9%; North Africa, 5%; Oceania and Caucasus and Central Asia lost ground (-1%). Much remains to be done, however; almost 783 million people still cannot get clean drinking water.

Progress in sanitation coverage has been slower, and the 2015 MDG sanitation target is unlikely to be met. Nevertheless, considerable progress was achieved in Eastern Asia, which increased sanitation coverage by 39% between 1990 and 2010; South-Eastern Asia, 23%; Northern Africa, 18%. Sub-Saharan Africa, Western Asia and Caucasus and Central Asia have experienced slow progress (4-5%) and Oceania has reported no progress. Globally, 2.5 billion people still lack access to basic sanitation.

Aid to sanitation and other sub-sectors

Another new feature in the data starting with 2010 flows, apart from the introduction of new types of aid, is the possibility to identify aid for sanitation separately from water supply (Chart 4b). This amendment to the DAC sector classification was done at the request of water experts concerned by the lack of information on the level of funding for sanitation. In their view, more accurate figures were needed to attract the necessary funds and promote development progress in this area.

The first results show that, for DAC members, aid activities for water supply represented 19% of total aid for water in 2010-11 and sanitation 18%. Aid for systems combining both water supply and sanitation represented a larger share (42%) of aid for water. The remaining 21% consisted of sector budget support, contributions to funds managed by international organisations, waste management and education activities. 2010 was the first year of implementation of the distinct sub-sectors for water supply and sanitation, and the recording of activities under the combined “water supply and sanitation” sub-sector is likely to decrease in future years.

Box 1 – Mozambique’s **One Million Initiative**, sponsored by the government, UNICEF and the Netherlands, is fully aligned with the National Water Supply and Sanitation Programme, which places priority on meeting the basic needs of the disadvantaged, and on decentralised management and user participation. In two years, close to one million people have been provided with access to a functioning improved water point and 433 villages with a combined population of 350,000 have been declared Open Defecation Free. An impact study showed a large increase in ownership and use of latrines. However, only a few latrines satisfy all conditions of adequate and safe sanitation, and it is not clear that communities will be able to meet maintenance costs in the medium term. [OECD Evaluation Insights July 2012]

Charts 4a and 4b. Sub-sectoral breakdown of aid to water and sanitation

2009-10, commitments, constant 2010 prices

Chart 4a. Bilateral and multilateral commitments
constant prices, 2010-11

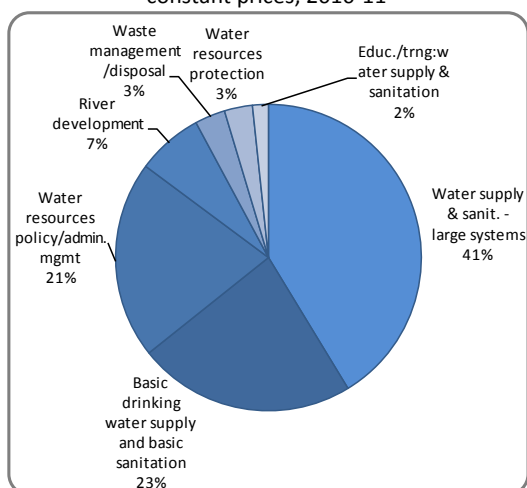


Chart 4b. DAC members’ bilateral commitments
constant prices, 2010-11

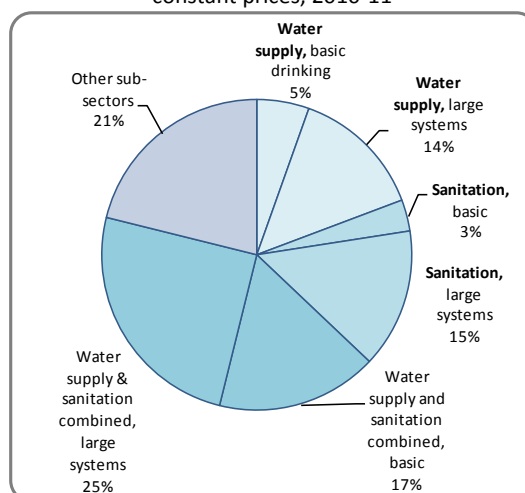


Chart 4a shows that projects for large systems are still predominant and accounted for 41% of total contributions to the water and sanitation sector in 2010-11.

Aid to water supply and gender equality concerns

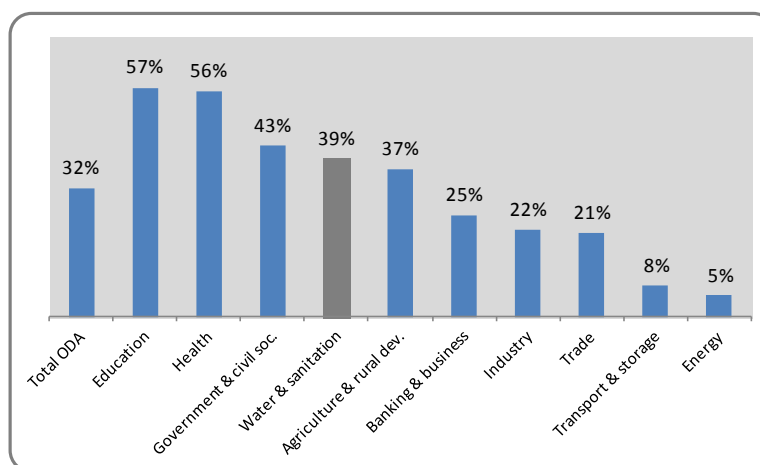
Data on DAC members’ aid targeting gender equality and women’s empowerment are compiled with the help of the gender equality policy marker. DAC members should screen and mark every aid activity they report to the CRS as either (i) targeting gender equality as a “principal objective” or a “significant objective”, or (ii) not targeting the objective. “Principal” means that gender equality is an explicit objective of the activity and fundamental in its design. “Significant” means that gender equality is an important, but secondary, objective of the activity. See www.oecd.org/dac/stats/gender.

Survey data from 25 countries in sub-Saharan Africa, representing 48% of the region’s population, reveal that women and girls bear a disproportionate share of the burden of collecting water, at a considerable cost in terms of their time. Further analysis shows that in these 25 countries, the mean time of one round-trip to collect water

is approximately 30 minutes, and it is estimated that women spend a combined total of at least 16 million hours each day collecting water. It is estimated that men spend 6 million hours.

Chart 5. Gender equality focussed aid

Share by sector, DAC members' 2010-11 commitments, constant 2010 prices



DAC members pay somewhat more attention to gender equality concerns in the water sector than on average: 39% of aid to water did address gender equality concerns while the share is only 32% for total aid. In social sectors other than water, however, the share is much higher: 57% for education, 56% for health, 43% for government and civil society.

What recent evaluations tell us

Evaluating development co-operation programmes, including support to water and sanitation, provides evidence about effectiveness and results in order to support accountability and inform efforts to improve the efficiency and impact of water supply and sanitation programmes on public health, economic growth and poverty reduction. Evaluation reports can be found at the OECD DAC Evaluation Resource Centre – DEREc www.oecd.org/derec.

Lessons learned distilled from recent evaluations of projects, as well as from analysis by the OECD Horizontal Programme on Water include:

- An integrated approach to water supply, sanitation and environment issues will help ensure success in delivery and use of water and sanitation services. For example, a water supply project may have adverse environmental effects through increased wastewater discharge if a sanitation component is not included.
- Water and sanitation projects should also support long term institutional reform and capacity building, in addition to focusing on short term delivery of physical infrastructure. Technical sustainability is dependent on building the capacity of community and government structures and on ensuring a stable revenue flow to cover operation and maintenance costs.
- Effective financial planning for the water sector requires finding the right mix of revenues from the so-called “3Ts”: tariffs (i.e. water rates or charges), taxes and transfers (including ODA grants). These are the ultimate sources of revenue for the sector and need to increase to allow the recovery of costs. Full cost recovery from tariffs which may theoretically be the ideal solution, in practice remains a distant objective in many countries. Well-targeted social programmes are necessary in order for poorer people to afford water and sanitation schemes.
- Private sector participation is not a panacea and its role has been limited, especially in rural areas. Past experiences have shown that effective partnerships in practice involve consumers/communities.
- Effective community/beneficiary participation in project design and implementation is paramount for enhancing implementation, acceptance and use of water and sanitation services, as well as ensuring ownership and sustainability.
- Donor coordination on the ground is a condition for aid effectiveness. Fixing institutional and regulatory frameworks upfront contributes to project efficiency.

Box 2 - Monitoring flows to the water and sanitation sector
DAC statistics - CRS Aid Activity database

DAC definition of water and sanitation

The DAC defines aid to **water and sanitation** as including water resources policy, planning and programmes, water legislation and management, water resources development, water resources protection, water supply, sanitation (including solid waste management) and education and training in water and sanitation. Data shown in this brochure are based on the water and sanitation sector (CRS Codes 14010 to 14081).

The definition of aid for water and sanitation excludes **dams and reservoirs** primarily for irrigation and **hydropower** and activities related to **river transport** which are recorded elsewhere in the classification (aid to agriculture, energy and transport respectively).

DAC statistics classify **humanitarian aid** as a separate category (the main purpose being to save lives in an emergency context), and do not record the ultimate sector of destination of humanitarian interventions (water, health, education, etc.). Statistics shown in this note therefore do not take into account donors' expenditures on water supply and sanitation that occurred in the context of humanitarian aid.

Recording of loans in ODA statistics

While the bulk of ODA is extended in the form of grants, loans constitute a large share of ODA to certain sectors. 54% of ODA to water supply and sanitation in 2009-2010 was in the form of loans.

If the loan satisfies the ODA criteria (see below), the whole amount is recorded as ODA. The grant element is not used to discount the face value of a loan in DAC reporting. Figures for loans in this paper relate to face value, no allowance being made for repayments.

For reference: definition of ODA

Official development assistance is defined as those flows to countries on the DAC List of ODA recipients and to multilateral institutions for flows which are:

- i. provided by official agencies, including state and local governments, or by their executive agencies; and
- ii. each transaction of which:
 - a) is administered with the promotion of the economic development and welfare of developing countries as its main objective; and
 - b) is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent).

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