



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

This note is produced in the framework of the OECD Horizontal Programme on Water. It contains statistics on Official Development Assistance (ODA) extended with the purpose of assisting developing countries to finance water supply and sanitation investments. Private funding is not covered.

Among the three sources of finance for the water sector – tariffs, taxes and transfers (“the 3Ts”) – ODA falls under transfers. In addition to the role it plays as a source of finance, ODA also supports capacity development for the provision of water services.

The DAC statistical definition of aid to water supply and sanitation is given in Annex.

➤ Main findings

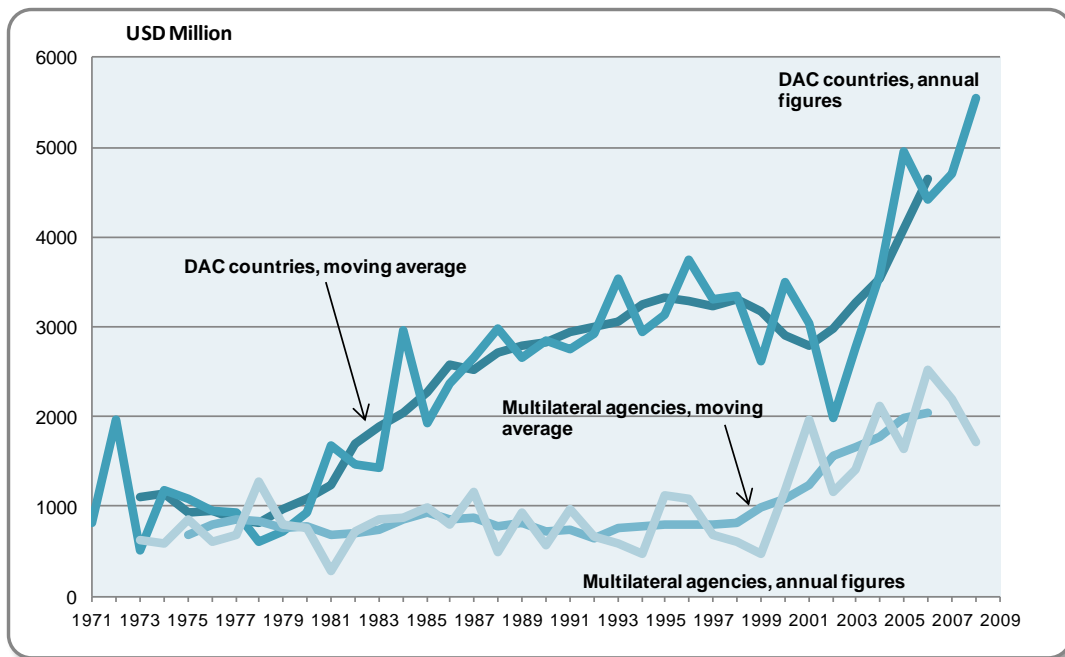
- After a temporary decline in the 1990’s, aid to water and sanitation has risen sharply since 2001. In 2007-08, total annual average aid commitments to water and sanitation amounted to **USD 7.2 billion**. Among DAC members, the largest donors in 2007-08 were Japan (on average USD 1.9 billion per year), Germany (USD 771 million), and the United States (USD 644 million).
- The share of aid to water and sanitation in DAC members’ aid programmes has also risen since 2001, but at a more modest pace: in 2007-08, aid to water and sanitation represented **7% of DAC members’ bilateral sector-allocable aid**.
- Over the period 2003-08 aid to water and sanitation primarily targeted regions most in need of improved access to water and sanitation: **Sub-Saharan Africa received 29%** of total aid to the sector, and **South and Central Asia 18%**. Poorest countries classified as “low income” received **43%** of total aid to the sector, two-thirds of which was in the form of grants.

Trends in aid to water and sanitation

Aid for water and sanitation has risen since 2001 after a temporary decline in the second part of the 1990s (Chart 1). In 2007-08, DAC countries’ bilateral annual aid commitments to the water and sanitation sector rose to **USD 5.3 billion** (Table 1). Taking into account multilateral agencies’ concessional outflows (assimilated to ODA), the total was **USD 7.2 billion**. Over the period 2003-08 bilateral aid to water increased at an average annual rate of 15%. Multilateral aid also rose over the period 2003-08 (4% annually).

Chart 1. Trends in aid to water and sanitation

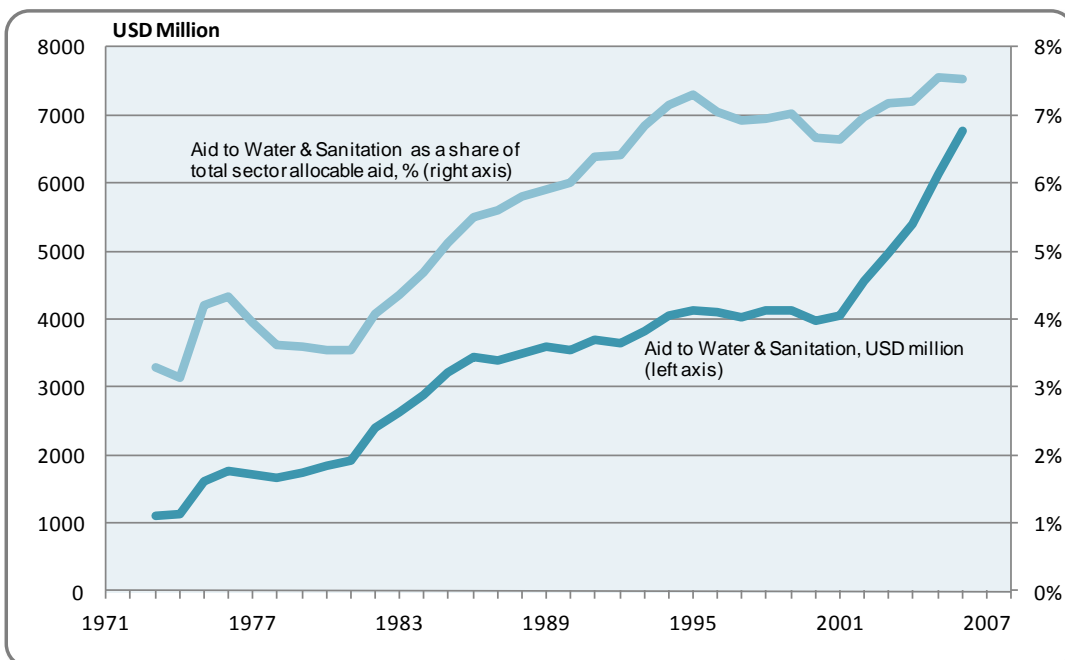
1971-2008, commitments, 5-year moving averages and annual figures, constant 2008 prices



Series in Chart 2 combine aid extended by bilateral donors and multilateral agencies. They present trends of aid to water and sanitation both in volume terms and as a share of total sector allocable aid – an indication of the extent to which donors’ aid programmes focus on water issues. Aid to water and sanitation has sharply risen since 2001 in volume terms, and the share in total aid has also increased although at a more modest pace. For DAC countries, the share has increased by one percentage point over the period 2003-08, from 6% in 2003-04 to 7% in 2007-08 (Table 1).

Chart 2. Volume and share of aid to water and sanitation

1971-2008, commitments, 5-year moving averages, constant 2008 prices



Main donors

Japan is the largest donor in the water sector, accounting for 27% of total aid in this sector for the period 2007-08. It is followed by IDA (15%), Germany (11%) and the United States (9%). Countries that have significantly increased their aid to the water sector in recent years include France, the Netherlands and Spain (through contributions to the IADB Fund for Water). They each represented 5 % of total aid to water in 2007-08, similar level as for the European Union institutions.

The donors that extend the highest proportions of their aid to the water sector are the AfDF (19%), Japan (17%), Italy (13%), Spain and the IDB Special Fund (12% each), Netherlands and IDA (11% each), and Germany (10%).

Table 1. Aid to water and sanitation by donor

Annual average commitments and shares in total sector-allocable aid, constant 2008 prices

	Commitments, USD million			% of Donor Total		% All Donors		Disbursements, USD million	
	2003-04	2005-06	2007-08	2005-06	2007-08	2005-06	2007-08	2005-06	2007-08
Australia	40.4	7.5	17.4	1	1	0	0	24.8	15.0
Austria	26.4	22.6	31.3	7	8	0	0	16.8	20.7
Belgium	27.3	76.0	99.5	8	8	1	1	48.4	52.2
Canada	122.0	35.9	35.8	2	1	1	0	63.5	42.2
Denmark	201.9	150.2	26.8	11	3	2	0	122.9	100.0
Finland	12.7	53.5	42.3	10	8	1	1	9.2	27.0
France	232.1	224.1	387.2	4	6	3	5	233.3	182.4
Germany	493.8	538.0	770.9	9	10	8	11	432.7	510.4
Greece	1.8	1.0	1.9	1	1	0	0	1.0	1.9
Ireland	25.0	19.8	23.3	5	4	0	0	19.8	23.3
Italy	42.8	76.8	112.7	9	13	1	2	40.8	37.9
Japan	911.8	1800.1	1922.5	20	17	26	27	721.6	1078.9
Luxembourg	17.9	15.2	16.7	9	9	0	0	15.2	16.7
Netherlands	171.1	400.6	383.4	10	11	6	5	151.6	297.8
New Zealand	2.1	4.7	1.6	2	1	0	0	2.9	2.9
Norway	31.8	49.2	48.3	2	2	1	1	46.9	48.4
Portugal	1.5	1.9	1.0	1	0	0	0	1.9	1.0
Spain	96.2	70.7	370.2	4	12	1	5	78.6	346.8
Sweden	62.9	113.9	67.3	5	5	2	1	77.0	66.5
Switzerland	42.0	60.2	41.8	7	5	1	1	41.5	44.5
United Kingdom	66.0	116.9	209.6	3	3	2	3	79.3	128.6
United States	596.2	948.7	644.1	5	3	14	9	1057.6	397.2
Total DAC countries	3225.7	4787.7	5255.5	8	7	69	73	3287.3	3442.3
AfDF	191.9	299.6	271.1	22	19	4	4	74.6	173.1
AsDF	178.0	224.3	141.1	17	9	3	2	..	..
EU institutions	495.8	877.3	377.0	8	3	13	5	385.8	447.1
IDA	939.4	739.4	1107.5	11	11	11	15	683.3	731.7
IDB Sp.Fund	0.0	25.6	32.8	6	12	0	0	..	..
IFAD	4.8	7.1	2.9	2	1	0	0	..	..
GEF	..	..	1.4	..	1	..	0	..	1.4
UNDP	3.4	2.2	2.1	0	0	0	0	2.2	1.5
UNICEF	21.4	25.0	43.7	5	6	0	1	25.0	43.7
UNECE	..	..	0.7	..	7	..	0	..	0.7
Total multilateral	1834.7	2200.5	1980.3	10	8	31	27	1170.9	1399.3
Total	5060.4	6988.1	7235.8	8	7	100	100	4458.2	4841.7

Notes: **General budget support**, once integrated in developing countries' domestic budgets, will contribute to the development of the water sector, but this contribution is not specified and not taken into account in the above figures.

Imputed multilateral contributions – Figures for DAC members refer to their bilateral aid. In addition to undertaking bilateral aid activities in the water sector, DAC members also contribute to multilateral agencies active in the field of water. Data for imputed multilateral aid for water are available at www.oecd.org/dac/stats/water. Earmarked funding to multilateral agencies in support of specific water programmes are classified as bilateral aid.

Korea became a DAC member on 1 January 2010. It is not included in the figures for this brochure, but will be integrated as from the next edition. Korea's aid to water and sanitation amounted to **USD 167.3 million in 2007-08 (annual average commitments)**, which represented 14% of its bilateral sector allocable aid.

Figures for **GEF** and **UNECE** in 2007-08 refer to 2008 only. Figures for **UNDP** in 2003-04 refer to 2004 only. Figures for **UNICEF** represent only a portion of its expenditures for the water, sanitation and hygiene programme (WASH). Excluded are cross-cutting expenditures attributable to WASH. In DAC sector classification these fall outside the water sector, under e.g. environment and administrative costs.

Geographical targeting of resources

The picture of targeting of resources is mixed. Sub-Saharan Africa, the region most in need¹ of improved access to water and sanitation, received 29% of total aid to this sector in 2003-08 (Chart 3). The next most needy region, South and Central Asia, received 18%. Poorest countries received 43% of total aid to the sector: 29% for Least Developed Countries (LDCs), and 14% for Other Low Income Countries (OLICs) (Chart 4).

Funds are highly concentrated in a relatively small number of countries: top ten recipients represented 44% of total financing to the sector (Table 2). A significant portion of aid is allocated to countries in difficult situations, e.g. Lesotho and Mozambique with low access to water/sanitation facilities received relatively high and increasing amounts of aid for water per capita (USD 45 per capita for Lesotho, USD 10 for Mozambique). However, numerous other countries with low levels of access received very little, with no sign of increase during the period (Togo, Somalia, Chad, Cambodia, Laos, Haiti).

Chart 3. Distribution of aid to water and sanitation by region, average 2003-08

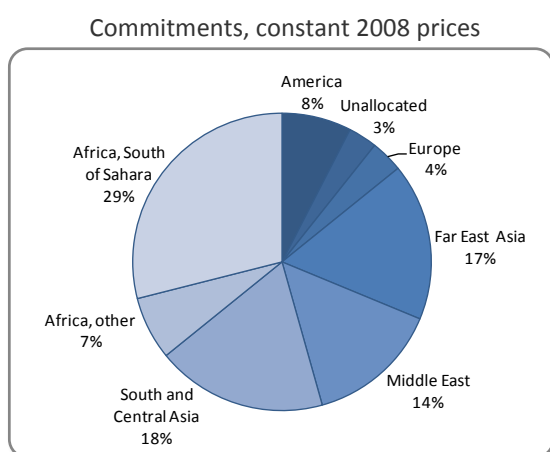
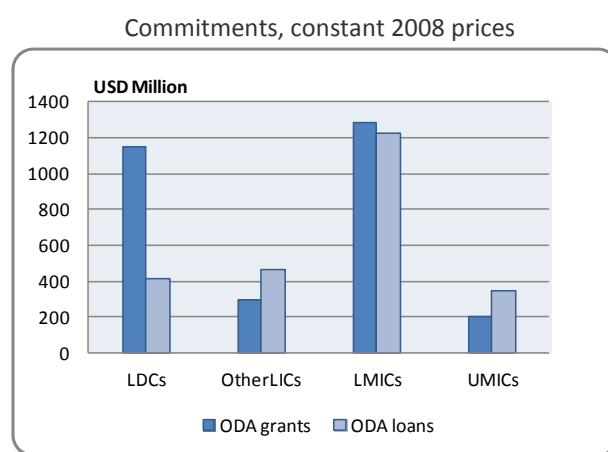


Chart 4. Distribution of aid to water and sanitation by income group, average 2003-08



Loans represented almost half of aid to the water sector. The share is 26% for LDCs and 61% for OLICs. In 2007-08 the largest projects undertaken by Japan were in the form of loans to finance water supply and sanitation systems in big cities (e.g. Basrah in Iraq; various cities in India; Panama city in Panama; Hue in Vietnam). IDA loans primarily benefited Sub-Saharan Africa; new lending to the water sector exceeded USD 100 million (annual average commitments) in the Democratic Republic of Congo, Ethiopia and Tanzania. Germany's largest activities were also in the form of loans; they were used to finance wastewater treatment plants and solid waste disposal in China. The United States concentrated on reconstruction in Iraq, and France on aid to Sub-Saharan Africa (which represented 38% of total aid to water by France, half in the form of grants).

¹ Based on WHO/UNICEF Joint Monitoring Programme indicators on access to safe water and sanitation.

**Table 2. Main recipients and donors of aid to water and sanitation sector,
2007-08 average commitments**

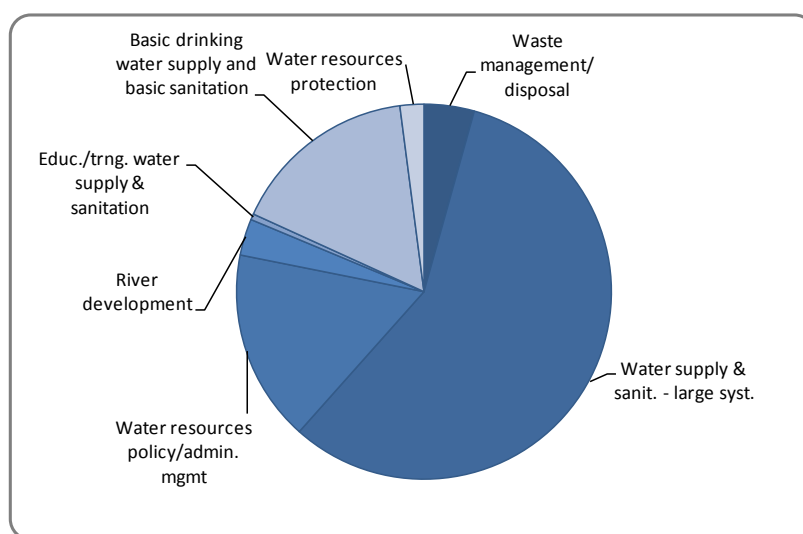
USD million, constant 2008 prices

USD million, average 2007-08	Japan	IDA	Germany	United States	France	Other donors	Total	% of water aid to all recipients
India	660	0	1	3	0	5	668	9%
Iraq	208	55	0	161	0	34	458	6%
China	244	0	94	1	1	12	352	5%
Viet Nam	216	31	12	0	25	48	331	5%
Tanzania	14	105	30	35	5	66	256	4%
Morocco	106	0	34	0	55	31	226	3%
Mozambique	1	10	0	103	0	109	224	3%
Congo, Dem. Rep.	0	116	14	1	6	84	221	3%
Ethiopia	9	102	0	3	6	98	219	3%
Bangladesh	2	56	0	0	0	157	215	3%
Other recipients	461	633	585	336	289	1753	4058	56%
Total amount	1922	1107	771	644	387	2396	7228	100%
% of water aid from all donors	27%	15%	11%	9%	5%	33%		

Main sub-sectors

Chart 5. Sub-sectoral breakdown of total aid to water and sanitation

Commitments, 2007-08, constant 2008 prices



Projects for “large systems” are predominant and accounted for 57% of total contributions to the water and sanitation sector in 2007-08. 68% of total ODA for large systems was in the form of loans, and loans also represented 33% of the financing of river development. By contrast, donors relied almost exclusively on ODA grants (90% of total) to finance basic drinking water and sanitation. Grants were also predominant in the sub-sectors of water resources policy and administrative management, water resources protection and education and training.

Annex – Technical note

Monitoring flows to the water and sanitation sector

DAC statistics - CRS Aid Activity database

DAC and CRS data are the unique source for official, standard and comparable statistics on Official Development Assistance (ODA).

The OECD Development Assistance Committee (DAC) collects aid flows at activity level through the Creditor Reporting System (CRS) and expanded CRS (CRS++), and in the form of aggregates through the annual DAC Questionnaire. The data collection is based on a standard methodology and agreed definitions. Data can be used to analyse trends and compare the efforts of donors.

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 divided into the sub-sectors shown in Box 1.

The sector classification does not currently distinguish between **aid for water supply and aid for sanitation**. However, in 2009, DAC members agreed to amend the sector classification to make this distinction. Separate data will become available starting with 2010 flows, and will improve ODA statistics in that field.

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. About a half of ODA to water supply and sanitation in 2007-2008 was in the form of loans.

To qualify as ODA, a loan must be **concessional in character** and convey a **grant element of at least 25%**. Concessional in character means the interest rate of the loan must be below market interest rates. The grant element is expressed as the percentage by which the present value of the expected stream of repayments falls short of the repayments that would have been generated at a given reference rate of interest (in OECD DAC statistics 10%). Thus the grant element is nil for a loan carrying an interest rate of 10%; it is 100% for a grant; and it lies between these two for a loan at less than 10% interest. To qualify as ODA, a loan must convey a grant element of at least 25%.

If the loan satisfies the ODA criteria, the whole amount is recorded as ODA. The grant element is not used to discount the face value of a loan in DAC reporting. Repayments of the principal of ODA loans count as negative flows, and are deducted to arrive at net ODA, so that by the time a loan is repaid, the net flow over the period of the loan is zero. (Interest is recorded, but is not counted in the net flow statistics.)

For reference: definition of ODA

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

Box 1. Aid to the water supply and sanitation sector: definition and sub-sectors

Water resources policy and administrative management (CRS purpose code 14010)

Water sector policy, planning and programmes; water legislation and management; institution capacity building and advice; water supply assessments and studies; groundwater, water quality and watershed studies; hydrogeology; excluding agricultural water resources (31140).

Water resources protection (CRS purpose code 14015)

Inland surface waters (rivers, lakes, etc.); conservation and rehabilitation of ground water; prevention of water contamination from agro-chemicals, industrial effluents.

Water supply and sanitation - large systems (CRS purpose code 14020)

Water desalination plants; intakes, storage, treatment, pumping stations, conveyance and distribution systems; sewerage; domestic and industrial waste water treatment plants.

Basic drinking water supply and basic sanitation (CRS purpose code 14030)

Water supply and sanitation through low-cost technologies such as handpumps, spring catchment, gravity-fed systems, rain water collection, storage tanks, small distribution systems; latrines, small-bore sewers, on-site disposal (septic tanks).

River development (CRS purpose code 14040)

Integrated river basin projects; river flow control; dams and reservoirs [excluding dams primarily for irrigation (31140) and hydropower (23065) and activities related to river transport (21040)].

Waste management/disposal (CRS purpose code 14050)

Municipal and industrial solid waste management, including hazardous and toxic waste; collection, disposal and treatment; landfill areas; composting and reuse.

Education and training in water supply and sanitation (CRS purpose code 14081)

Note: To assist in distinguishing between “basic drinking water supply and basic sanitation” on the one hand and “water supply and sanitation – large systems” on the other, consider the number of people to be served and the per capita cost of provision of services.

- Large systems provide water and sanitation to a community through a network to which individual households are connected. Basic systems are generally shared between several households.
- Water supply and sanitation in urban areas usually necessitates a network installation. To classify such projects consider the per capita cost of services. The per capita cost of water supply and sanitation through large systems is several times higher than that of basic services.

Example of data collection at activity level

For most types of financial flows, the CRS database records the face value of the activity at the date a grant or loan agreement is signed with the recipient (“commitments”). Data on the amounts disbursed each year are also available at the activity level (“disbursements”). Aid flows are measured on a calendar year basis.

Example: Japan committed a loan to Indonesia in 2005 to support a project to “Develop water resources and protect flood prone areas”, with subsequent disbursements from 2006 onwards (current USD thousands).

Original commitment

Year	Donor	Agency	Project number	Recipient	Sector code	Amount	Flow type	Currency
2005	Japan	JBIC	JBICIP-522	Indonesia	14040	84 877	Loan	USD

Subsequent disbursements

Year	Annual disbursement	Cumulative disbursement	Remains to be disbursed
2006	2 297	2 297	82 580
2007	3 441	5 738	79 139
2008	6 378	12 116	72 761