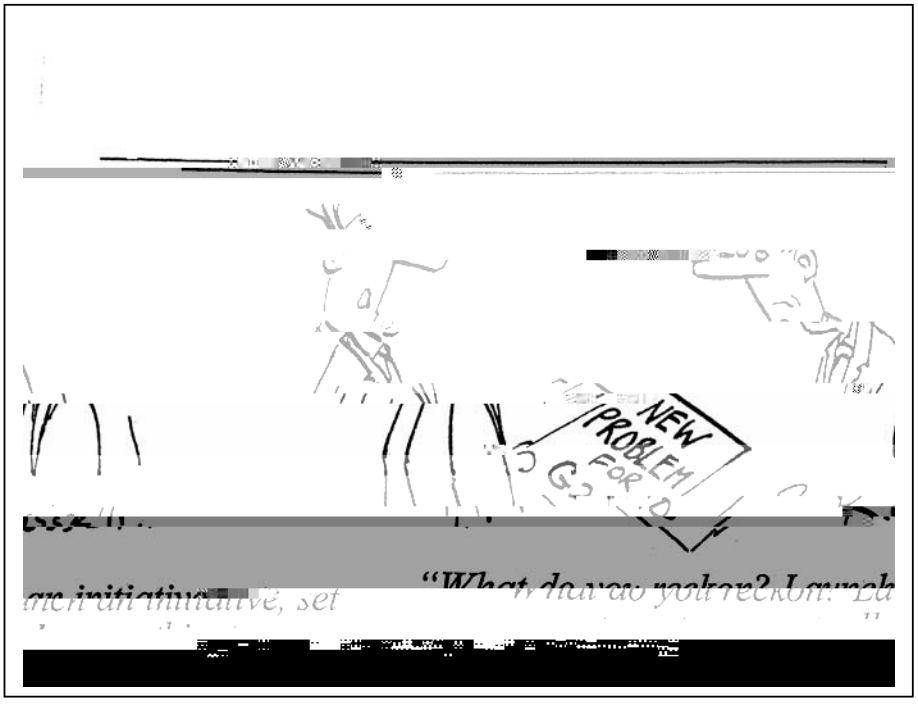
Safe Drinking Water and Sanitation for All – A G20-Led Initiative

Background Discussion Paper
For
The G20 Water Policy Workshop
Alexandria, Egypt, December, 2004

Ralph J. Daley, Zafar Adeel, Colin I. Mayfield, Caroline King and Velma I. Grover
United Nations University - International Network on Water, Environment and Health
Hamilton, Canada



Foreword:

The G20 at Leaders' Level?

The following document is a contribution from UNU-INWEH to a research project designed to stimulate debate on the future role of a G20 at leaders' level in addressing the critical global challenges. The initiative, commissioned by the Prime Minister of Canada, is being undertaken by the Centre for Global Studies (University of Victoria), the United Nations University and the Centre for International Governance Innovation (University of Waterloo), at the request of the Canadian Department of Foreign Affairs.

The main idea is to examine, through the lens of specific issues, whether a G-20 Leaders' Forum can help resolve issues that are intractable in existing multilateral Ministerial fora or Summits. Also to be considered are questions on the future composition of the G20, its impact on existing fora, the best means to engage the major powers and future roles for civil society.

Throug0.5(rent)5.N 8gage th4umettro(raj)-65t(d partn an)-65isswisa seriepowhesometanetitgpowheonrae i-1.15
..

consequence, actions and commitments for capacity building must be scaled up by at least an order-of-magnitude if there is to be any chance of success.

2.2 The SDS Imperative for Global Development:

Access to safe drinking water and sanitation lies at the heart of human well-being and is rightly labeled as a "moral and ethical imperative" by Lenton and Wright (2004) in their Interim Task Force 7 Report[6]. It is also a fundamental challenge to human security - an issue area that also resonates with G20

- The creation of responsibilities for water and sanitation construction and maintenance brings skills, employment and collective pride to communities.
- Where landlords and tenants can resolve problems relating to tenure in order to

Table 1. *Numbers of people without safe drinking water and sanitation within the G20 and prospective G20 countries (2000 data, in millions; UNICEF, 2001[12])*

G20 Country	Sanitation Unserved	Safe Water Unserved
	(Millions of People)	
China	765.1	318.8
India	726.4	161.4
Indonesia	95.4	46.7
Brazil	40.9	22.2
Mexico	25.7	11.9
Korea	17.3	0
Turkey	6.7	12.0
	5.6	6.0
	0	1.5
[redacted]		

power and flexibility inherent to the group, it can take a decisive leadership role in the global arena on this non-controversial issue.

4.1 Capacity to Implement Within the G20 Member States:

The G20 is superbly equipped to address the SDS problem, given the economic and technological capacity of its member states. In its current composition, the gross national income of the G20 countries is estimated at more than US$ 25 trillion (2001 figures[13]). The G20 developed countries (Australia, Canada, France, Germany, Italy, Japan, UK and US) provide about US$ 40 billion in official development assistance (ODA) and about US$ 50 billion in foreign direct investment (FDI) into developing countries each year. Such economic capacity pre-eminently qualifies the group for action on the SDS initiative, which has a modest financial requirement and can lead to significant, long-term, economic benefits.

The G20 developed countries also lead the world in the number of scientists, engineers and technicians, estimated to be over 3 million (2001 figures[14]). This wealth of human resources is linked to state-of-the-science research, technology and field implementation in water and sewage treatment. Many cases of successful North-South transfer of technology for provision of water and sanitation services can be cited. Collectively, the academic and training institutions in the G20 can also address the capacity building challenge; although it will, at first, require institution-building in developing countries.

4.2 Powerful Leadership to Galvanize Action:

The presence of the US, EU, Brazil, China and India gives the G20 enormous political, economic and moral impetus, when taken together as a group. Given that a predominant factor in the current impasse to meet the MDGs is the lack of political commitment by

This would hasten delivery on both the MDGs and the SDS challenge; outlines of possible implementation scenarios are outlined in Section 6.

5. Essential Elements of Action:

This section briefly highlights the essential elements for successful global provision of SDS services. These include stakeholder engagement, monitoring and evaluation, capacity

5.2 Monitoring and Assessing Progress:

Monitoring and evaluation are essential elements of the global SDS initiative, both to chart its progress and to understand its impacts. Although considerable progress in monitoring household access to SDS has been made in recent years through the UN Joint Monitoring Programme (JMP), we still do not have accurate figures for the total number of people who are un-served. Monitoring must start with the *status quo* to better understand the composition and situation of the population that is currently un-served. This can provide key information about the challenges and lead to applied research needed for innovations in technologies and management approaches. Continued monitoring would also become an integral part of the evaluation process.

As implementation may be phased in, and proceed at different rates in different regions and countries, it is essential that targets, as well as robust systems to monitor them, be established. Targets and milestones should, of course, be set in a transparent fashion, thus challenging countries to plan explicitly and carefully. Only when progress is assessed periodically can adjustments in strategy be made to sustain progress.

The SDS initiative will need to be evaluated at regular intervals during its 20-year life span. Such evaluations should be systematic, independent assessments of the design, implementation, and impacts of the initiative. These become an aid to learning and enable planners and decision-makers to draw lessons for the future. Such monitoring and evaluation would also optimize the use of available financial and human resources through improved implementation (UN, 1984[15]).

5.3 Strengthening Implementation Capacity:

As discussed in previous sections, lack of human, technological, infrastructural and institutional capacity is the foremost impediment to universal access to SDS services. Yet even now there are no reliable estimates of the global capacities needed to meet the MDGs, or to provide SDS services to 100% of the global population, as envisioned in the SDS Initiative. Developing such scientifically reliable, global estimates should be an early priority.

The magnitude of the SDS challenge is so immense that hundreds of thousands of professionals, technicians and managers will be needed at all levels. With only a 10-year window to achieve the MDGs, many argue that the focus of capacity building must be on *adult education* directed to the *current* generation of water practitioners. Relying solely on education of the next generation – undoubtedly essential in its own right – may be too little, too late.

To successfully undertake the SDS initiative, it is essential that all components or “pillars” of the capacity development process be addressed in an integrated fashion. We propose an interdependent "Four-Pillar" framework for such capacity building, namely:

- Pillar 1 - the capacity to educate and train, including community awareness building, adult training and formal education, so as to provide sufficient and competent human resources to develop and apply enabling systems,
- Pillar 2 - the capacity to measure and understand SDS implementation, through monitoring, applied research, technology development and evaluation, so that reliable data are used for analysis and decision-making.

-

Table 2. *Incremental cost for various wastewater collection and treatment options by 2015*

- Multilateral Financial Institutions (MFI) lending directly to sub-sovereign entities
- National, regional or international Funding Facilities to pre-finance disbursements to sub-sovereigns
- Decentralized Funds for local initiatives and "Catalytic" Funds to mobilize other flows, empower players and report on impacts, aid efficiency and leverage
- Use of financial intermediaries, e.g., national development banks, to channel external and central government funds and to raise funds in local markets
- Credit pools with an option of joint and several liability
- Revolving funds using grants to finance the public preparation and structuring costs of complex projects, such as private participation projects
- ODA finance for water project start-up costs
- Removal of current constraints on government and MFI guarantees
- Micro-credit schemes to provide seed capital, initial reserves and guarantees
- Revising tariff structures to create cross-subsidies
- Raising Export Credit Agency limits for local costs for water projects as high as 50%

To ensure that SDS resources are effectively used at the local level, the local capacities to design, finance and manage improved service delivery must be greatly enhanced. To this end, the Camdessus Panel and others have urged that corruption, managerial capacity, sustainable cost recovery and legal and contractual aspects of SDS management within developing countries be addressed.

It should be noted that the developed world, through the G8, has already made a commitment through its 2003 summit to an Action Plan for Water, addressing many of the financing issues, including a pledge to provide targeted subsidies for the poorest communities. The G8 also announced its commitment to help mobilize domestic resources for water infrastructure financing through the development and strengthening of local capital markets and financial institutions, including revolving funds in local currency, risk guarantee schemes and support for the development of efficient local financial markets. These commitments, met in a comprehensive manner, can be an effective first step towards SDS implementation.

5.6 Creation of Networks to Facilitate Action:

For discussion purposes, we propose the creation of multi-stakeholder Governance Networks (GNs) and Water Action Networks (WANs) to better engage stakeholders and to improve capacity development. The former networks (geographically horizontal) would serve communities, countries, regions and the world in ensuring that all elements and aspects of the SDS initiative are appropriately integrated. The latter networks (thematically vertical) would ensure that any given action area is fully capitalizing on the knowledge available from community to global scales. In this context, "community" is arbitrarily defined as the lowest scale of operation, whether a rural region, village, town, peri-urban development, urban area, or part of a city.

The goals of GNs and WANs would be: information diffusion and archiving, exchange of best practices, coordination, trust building, professional socialization, mutual governance and technical assistance, advocacy and oversight, and norm setting. Schematically, the inter-relationship of these networks is shown in Figure 1.

Figure 1. *A schematic description of the multi-tiered thematic and geographic networks; WANs and GNs, respectively.*

The membership of GNs at the local level would include: local governments, local business people, community banks/credit brokers, suppliers of water/infrastructure (engineers, managers, laborers etc), consumers, NGOs, and academic institutions, as appropriate. They would address, *inter alia*: integrated "learning by doing"; accountability of service providers; local coalition building; incorporation of gender considerations into policy and program design; establishment of national standards; and local-level evaluation of impacts and effectiveness. The GNs would operate as four-tiered networks focused on each specialty action area; the four tiers being:

- Community-level networks comprising village, town, peri-urban and urban representatives;
- National networks of local community representatives, chaired by national governments;
- Regional networks of national representatives, chaired by a selected G20 nation; and
- Global networks, comprising regional chairs, plus the G20 representatives.

The WANs would diffuse knowledge to the GNs on critical process functions, e.g., policy development, capacity building, monitoring & evaluation, research & development, financing,

and scale it takes, must acknowledge and respond to this reality. Scaling up and aggregating these local processes to the global level, in a responsive and effective manner, is an

A clear distinction would be maintained between the proposed actions in the North versus the South. For example, this campaign in the developed (or G8) countries would mobilize public support and facilitate allocation of human, technological and financial resources needed. In developing countries, it would help educate various stakeholders on the actions needed to provide SDS services to all.

Limited, but focused, capacity building would be undertaken to showcase North-South technology transfer, South-South information exchange and local-scale implementation. The primary targets for this exercise would be local and national governments and their agencies.

The global capacity-building program would primarily focus on human resource development through training of professionals needed for on-the-ground implementation of the SDS initiative. This would also indirectly enable effective transfer of knowledge and technologies from North to South and South to South. Capacity building should encourage and challenge national-level implementation and educational institutions, as discussed earlier in Section 5.3.

A parallel effort to facilitate development of institutions, particularly at the community and national level, to accelerate implementation must also be undertaken. Such institutions are critical to ensure sustainability over the 20-year life of the SDS initiative.

The G20 would likely need to create a G20 Water Secretariat to oversee the planning and management of the advocacy, networking, capacity building and monitoring & evaluation exercises. This secretariat would facilitate the flow of resources for these activities and provide an interface to the multilateral and/or national partners. It would also monitor and evaluate the effectiveness of the advocacy program, as well as the horizontal and vertical networks. The work of the G20 Water Secretariat could be further reinforced by the creation of an expert panel, particularly focusing on the public and private financing of the SDS initiative. The global-scale advocacy program, capacity-building initiative and associated secretariat are together estimated to cost about US$ 300-600 million per year for the duration of the SDS initiative.

As in Scenario A, service provisioning would be undertaken through other international, multilateral mechanisms and implemented locally, with minimal involvement of the G20 Water Secretariat.

The G20 group is ideally suited to provide the directional guidance and facilitation envisioned in this scenario. On the one hand, state-of-the-science technologies and management practices are available in its developed–country members, and on the other, its developing member countries have a wealth of experiences (successes and failures) in working with poor communities to provide them with SDS. Combining the two can become a powerful educational and motivational force worldwide.

As noted earlier, more than two-thirds of the SDS challenge lies in the G20 countries. Thus, the capacity building and networking envisioned in this scenario would also be seen as a politically favorable and “marketable” undertaking for the G20 governments.

6.3 *Scenario C:* Joint Multilateral Global Implementation:

In this scenario, the G20 would serve as the engine to drive the effective global-scale implementation of the SDS scenario through its own commitment and funding. It envisions implementation by the G20 acting directly and setting a stronger pace, and by enhancing the actions of multilateral and bilateral development entities. The partners would include Bretton-Woods institutions, the UN System, regional development banks and bilateral aid agencies. Such an approach would likely have a strong multiplier effect by capitalizing on synergies and minimizing conflicts.

The multilateral partners would be challenged through an action-oriented global agenda, by provision of funds for joint implementation and by creation of an action forum for recipient countries. This means that development and deployment of initiatives for advocacy, stakeholder engagement, capacity development, monitoring and evaluation and service provisioning will be undertaken jointly with the multilateral partners. Through G20 coordination, multilateral partners can be actively engaged as players in the GNs and WANs. Such joint implementation can complement the ongoing work for the World Water Development Report (WWDR) and other initiatives that will likely be developed under the

aegis of the UN International Decade for "Water for Life" (2005–2015), as it becomes operational.

The G20 countries would also assume a more direct role in provision of SDS services at the grass-roots level. Through a more coherent and directed G20 effort, expertise can be channeled from one country to another, stakeholders complaints can be taken up systematically and addressed, and factors currently inhibiting progress on SDS, at whatever level, can be identified and resolved. Working in support of national and local institutions, and in collaboration with multilateral partners, on-the-ground implementation can be boosted, both to ensure and to effectively monitor the incremental growth needed in service provisioning.

A comprehensive G20 Water Secretariat, backed with the appropriate financing mechanisms, would be needed for successful implementation of this scenario. Required funding is estimated to be in the order of US$ 2-4 billion a year throughout the duration of the SDS program.

6.4 *Scenario D:* G20-Led Global-Scale Implementation:

This scenario involves full-scale, comprehensive, integrated implementation of the SDS initiative by the G20. All elements will be tackled simultaneously, with a very substantial commitment of funds. The elements include an accumulation of all the actions outlined earlier in Scenarios A through C, with the G20 assuming full implementation responsibility with due collaboration and support from multilateral partners. For this purpose, we suggest it would be necessary to create a global-scale, G20-based Water Agency.

The G20 Water Agency would manage and finance the preparation and promulgation of a "Global Master Action Plan" (GMAP) within 12 months of inauguration of the SDS initiative. It should include the basic implementation strategy, leaders' communications plan, institutional delivery mechanisms, a robust financing framework, capacity development strategy and monitoring and assessment methodologies. It is estimated that the annual budget of the Water Agency would be around US$ 10-15 billion year (using the crude estimates provided in Section 3). Creation of a decentralized "Global Water Facility" – as part of the Water Agency – would likely also be necessary to ensure effective disbursement of funds for all activities.

By integrating global- to local-scale actions, the Water Agency would effectively overcome inertia and impediments to service provision and infrastructure development. Needless to say, the G20 leaders are well positioned to deploy such a Water Agency, which would be nearly impossible under the current inter-governmental, bureaucratic settings within the UN system.

Once agreed upon, the same strategic template and annual planning process can be used from the local community to the national and even region level. These "nested" plans would specify budgets and capacity development goals at each level. Without duplicating functions, the Water Agency would work in partnership with national Ministries of Health and Environment, contributing to overall institutional strengthening across the globe.

6.5 *Epilogue:* Challenges to SDS Deployment:

Implicit in the gradient of increasing commitment shown in Table 3 – which summarizes key actions under each scenario – is also the increasing degree of complexity and challenge for successful deployment. This section identifies some of these challenges.

Table 3: *Suggested scenarios for implementation of the SDS initiative by a G20 Leaders' Forum.*

Scenario / Action Elements	A Global Advocacy & Social Marketing	B (+A) Directed Global Facilitation	C (+A+B) Joint Multilateral Global – Scale Implementation	D (+A+B+C) G20 - led Global - Scale Implementation
Political Goals	Á G20 commits to build massive global public awareness of SDS water crisis	Á G20 commits to providing the developing countries		

		networks and capacity building	SDS services and infrastructure, but with augmented resources from G20 countries	(GMAP), focusing on "nested" country-level plans, rolled up from the local to national level and facilitated by the global SDS matrix of networks
Mobilizing Finances	Á Commit dedicated new funding of US **$30-50 million** for social marketing through a G20 "Global Water Awareness Fund"	\ Commit to dedicated new funding of US **$300-600 million** for facilitation program \ Establish a global experts panel on enabling public-private financing for SDS	Á Commit to dedicated new funding of US **$2-4 billion** for joint implementation Á Collaborate with partners and countries to systematically remove institutional and legal barriers to local-level financing (e.g., sub-sovereign MFI lending, start-up funding, loan guarantees, tariffs, credit limits, banking intermediaries) Á Facilitate allocation of a significant portion of funding amongst the multilateral partners to the SDS initiative	\ Commit dedicated new funding of US **$10-15 billion** to fund GMAP \ Create a global "enabling fund" to catalyze national and global SDS investments (e.g., pre-financing, credit pools, micro-credit schemes, etc) Á Create a large, decentralized "Global Water Facility" to provide revolving funds and infrastructure grants to poor communities
Organizational Strategies	Á Create a small,			