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MANAGING INFORMATION RESOURCES

in Water Supply and Sanitation

Towards a Strategy for Capacity Building in the 1990s

This brief paper presents the rationale and strategy for information management as an integral part of capacity building for the sector, as underwritten by the Informal Information Group. The objective is to solicit the commitment and cooperation of all those working toward sustainable water supply and sanitation - and water resources management - for a practical approach to information management for planning and management.

The Challenge

The years of the International Drinking Water and Sanitation Decade (IDWSSD) are now behind us. During IDWSSD, much good work in many countries took place. New technologies were exploited on a large scale. Rediscovered technologies were adapted and improved. Earlier efforts in community participation matured into the community-based management concept. Thus, for the first time, communities, and particularly women, were involved as partners in project design and implementation. Engineers, sociologists, and technicians were trained in new techniques. And many data and experiences on technologies, water resources management and project delivery mechanisms were gathered and evaluated.

Much of this work, however, remains unheralded, unshared, and inaccessible, even within the originating country. It has become clear that many achievements during IDWSSD, and since, only partially reach their full potential due to inadequacies in the communication and application of information. Similarly, the value of comprehensive strategies in information, education and communication to achieve a better understanding by partners (both in and outside the sector) and users of the importance and implications of water supply and sanitation is only just being recognized.

Capacity in Information Management is a fundamental pre-condition to sound sector planning and management. It lays the foundation for effective monitoring and evaluation, (applied) research, water resources management, appropriate technology choice and community management approaches, human resources development and training, education and communication.

Past experience has clearly shown that Information Management, i.e. the capacity to manage information flows and ensure the effective use of information, is essential to optimum performance in water supply and sanitation, and in water resources management (as referred to in the Delhi Declaration).

Information decides between an efficient, quality performance and mediocrity.

The year 2000 is now at our doorstep. The time has come to grasp the moment, to launch a new set of initiatives to manage information resources with the same professionalism as financial and human resources, to create clear points for tapping, sharing, consolidating and evaluating information as an indispensable part of water supply and sanitation project management, and to translate this into action by integrating information management activities into regular budget and planning processes.

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The Will

Much thought has been given to how best to achieve more effective water supply and sanitation programmes in developing countries. Time and again, the need to build capacity for water supply and sanitation (WSS) Information Management has been found to be of strategic importance. In recognition, a number of initiatives have been undertaken to build capacities to absorb and utilize information (1).

In an attempt to lay the basis for a evolutionary approach to capacity building in Information Management, the INFO-IMPACT meetings organized in 1987 at the initiative of the Steering Committee for Cooperative Action for the IDWSSD, capitalized on the experiences gained in these initial activities. On the basis of needs and problems the INFO-IMPACT activity defined four essential elements for effective WSS information systems in developing countries: **assessment of needs and resources, product development, capacity building and promotion.** Recent reports (2,3) highlight the continuing validity of these four elements.

The resulting Framework for Technical Information Exchange outlined in detail the inter-relationships between these elements and underlined the practical benefits at all levels (4). INFO-IMPACT's findings were subsequently incorporated into the Interlaken Action Agenda, calling for policy-level action to assure information exchange for appropriate project design and support as part of project formulation and approval (5). Initially focusing on technical information exchange, it has gradually emerged that the principles of the Framework are basic to all aspects of Information Management.

The Temporary Working Group on Communication of Information (TWG-INFO) reported to the 1990 Committee of the Collaborative Council that "communication of information is a matter of priority importance in future plans for accelerating the provision of sustainable WSS programmes in developing countries." Representing the consolidated views of some fifty WSS sector and information specialists, including specialists from 12 developing countries, the TWG-INFO called for adoption of **Communication of Information** as an essential element of the six Global Sector Concepts endorsed at Interlaken. The report highlighted four aspects of integrated Information Management -- Project and Sector Information (PSI), Technical Information Exchange (TIE), Management Information Systems (MIS), and Public Information and Promotion (PIP). The latter has formed the foundation for the present broad based initiative on Information, Education and Communication.

The Collaborative Council's 1990 Committee (6), and the Collaborative Council (7) approved the recommendations and endorsed Communication of Information as an essential component of sector strategy. The Council stressed that the focus of Information Management should be on ensuring that developing countries establish and/or strengthen capacities to contribute and receive information through their own channels. It urged ESAs to commit themselves to integrate Information Management as an essential part of water supply and sanitation project proposals.

The Global Consultation on Safe Water and Sanitation for the 1990s, held in New Delhi in September 1990, stated four guiding principles for water supply and sanitation efforts for the next decade. Underlying these principles were calls for "capacity building", for government to change its role "from that of provider to that of promoter and facilitator," for integrated "information, education and communications strategies" in human resource development, for empowerment of rural and urban poor in planning and resource mobilization, and for service agencies capable of being "more cost-effective and responsive to consumer needs and demands." Running through each "condition for accelerated progress" is a quiet prerequisite: capacity building for highly effective information systems.

Alongside the Global Consultation a first meeting of the Informal Information Group committed itself to increased collaboration in the promotion, development and implementation of information activities, focusing in particular at capacity building at country level. Members of this Group presently include amongst others sector support institutes such as ITN centres, specialised sections within WHO and its regional offices, as well as AIT, CIEH, IDRC, WASH and IRC.

In marking out the main lines of a global strategy for WSS in the 1990's, the Delhi Statement sends a potent message to each participant in the chain of WSS delivery. More than ever, quality information will be needed by sector planners to promote and facilitate choice of project and programme approaches, by financial planners to optimize funding resources, by trainers to support institutional human resources development and community management, by communities to know how best to improve and expand services, by technicians and project staff to track all the aspects of implementation from resources planning, ground water surveys, new technologies and solutions, to progress monitoring and system utilization.

Progress in WSS delivery can be no more accelerated than the weakest link in appropriate information delivery. Progress will thus depend on meeting growing demands for practical means and facilities to manage information more effectively.

The Way

The sector-wide will to pursue effective information resource management is supported by considerable project experience. A report on IDWSSD Technical Information Exchange activities, prepared by WHO for the 1990 UN General Assembly, listed no less than ten countries, ten United Nations agencies or groups, two regional UN commissions, three international aid agencies, six bilateral aid agencies, and 18 NGOs active in various types of WSS-related information exchange activities (1).

Much of their experience illustrates the complex of factors affecting WSS information management development when analyzed from national or comparative perspectives. During the first half of 1990, case studies of national water and sanitation information systems in four countries (Ethiopia, the Philippines, Tanzania and Uganda (2)) found that "in comparison with other sectors such as agriculture and health, the importance of developing information systems in the water sector seems to have been seriously neglected." The studies identified five key areas needing attention:

- 1) an appropriate organization structure,
- 2) a cadre of competent, highly-motivated and well-qualified personnel,
- 3) consolidation and protection of existing information,
- 4) adequate physical facilities, and
- 5) adequate provision for both capital and recurrent expenditure.

The lessons emerging from experience and experimentation point the way to a practical approach for the 1990's. Within projects, programmes and sector institutes staff should be assigned to deal specifically with information exchange. A budget line needs to be established to enable staffing, acquisition, training, development, promotion and extension. In short, a *capacity for Information Management* needs to be developed that allows an institution to take proper care of its internal information flows and monitor and access relevant external information resources. The Framework developed in the context of the 1987 INFO-IMPACT meetings, provides an approach for capacity building that could be applied to advantage.

Capacity development at national and sub-national level would further address a problem that becomes ever more serious: the accessibility and tailoring of information products and services.

Often too many sources of information produce too many materials of only partial practical usefulness to the target group, whereas there are simultaneously many demands for forms and formats of information which are not available. Better needs assessment to tailor information to user preferences is a prerequisite for improved flow and utilization. Hence high priority should be given to *matching information needs and services* by re-packaging, reformatting and/or translation of information materials to ensure easier access and assimilation by users.

Local expertise is often a neglected resource for consolidation of information generated within a country. A wealth of information is present at field level but little of it is recorded or reaches a larger audience. What comes through is often written up by expatriate researchers and project staff in a foreign language and is thus not easily accessible in the country of origin. Managerial encouragement and in-service training should help to demonstrate the value of information for individual performance as well as for the performance of the institution as a whole.

Such encouragement in the collection of indigenous information and expertise will bring about an attitude of *appreciation of the value of "own" information* at all levels. The appreciation will in turn facilitate collection of good quality data by field staff for management and monitoring purposes. When management attitudes are conducive and opportunities are provided, it will become more natural for staff to commit their experiences and insights to project reports, newsletters and professional journals, thus in turn contributing to capacity building through information exchange.

The Commitment

Certain key principles are now clear. Information, like water, is not a luxury. Information performs the same keystone function in water and sanitation as it does in other sectors of society. If the information is incomplete or incorrect, decisions and priorities will be skewed. Lack of hygiene education and user awareness, for instance, will lead to non-acceptance or non-utilization. Lack of information exchange will lead to wasted resources and unnecessary duplication of efforts.

Readily available current information on experience and methodologies, both from national and external sources, is thus indispensable to decision-making. Sustained access to potable water and improved sanitation requires sustained access to reliable information resources accumulated, tapped and managed in a professional manner.

It logically follows that specific capacities need to be built and strengthened within institutions, programmes and projects that take charge of collecting, consolidating and providing access to information e.g. for project/sector planning and management, on technology choice and community involvement approaches, on human resource development, on monitoring and evaluation techniques, and for use in public and political awareness raising.

These principles of course have counterpart lessons about inherent dangers. Capacity building efforts will have a temporary impact if the institutionalization of information collection, storage, management, promotion and utilization is neglected. Information consolidation schemes fade if not an essential part of on-going implementation and decision-making. Information services and products wilt if they are producer-driven rather than user-driven, or if they are funded as a separate initiative rather than as an integral part of operations. Information remains unused if there is insufficient appreciation and skill in handling the varied information needs of different types of users. The value of information is directly proportional to the ease of knowing where and how to ask for it, where and how to share/store/update it, and how quickly it is to find for ready application.

Managing information clearly entails much more than just spreading it around. Information is a resource; communication is the process, that allows assimilation of information thus enhancing the knowledge of people and their capacity to make the right decisions. Communication of information involves establishing adequate skills, channels and mechanisms to encourage interactive packaging, promotion and extension to meet the needs of a diverse clientele. Capacity building for information management hence involves building, to cite Delhi, "an enabling environment" of policy, people, and national sector institutions.

Thus, as a matter of national sector development policy, we urge governments, ESAs and sector support institutions to **emphasize capacity building for information management** as an essential component of sector strategy by committing financial, human and physical resources for information management capacity development as part of programme and project activities or as a contribution to institution building.

As part of the process of capacity building **the necessity to match information needs and services** to ensure easier access and assimilation by users **should be underscored**, while by appreciation and corresponding action **the value of "own", indigenously generated information should be promoted** at all levels.

Conclusion

This paper aims to promote a clear commitment towards developing a sector strategy and an institutional framework for Information Management. In particular, this commitment should respond to the need to support capacity building for information management development geared to user-driven services, operated and financed as part of on-going activities, and focused on appropriate facility and human resource development.

The members of the Informal Information Group have formulated this strategy statement to emphasize the importance of Information Management to the Sector and to demonstrate their commitment to support the development of Information Management capacities at country level.

Commitment to capacity building for Information Management by governments and ESAs is now required to further boost development activities in Information Management and to allow information to contribute its share to optimization of Sector efforts.

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