

MAPPING GLOBAL EFFORTS I

This overview presents a selection of UNESCO-IHE's more than 140 capacity development projects around the world. The Institute works with international partners to advance the competencies of knowledge and capacity-building institutes in the Global South, to strengthen water sector organizations to improve their performance and to contribute to the global agenda on water sector capacity development. UNESCO-IHE utilizes a range of different capacity development activities – often in combination – to engage its beneficiaries in learning and the generation of knowledge and innovation.



INNOVATIVE PRACTICES IN URBAN WATER CYCLE MANAGEMENT

Contribute to the adaptation and mitigation of climate change effects on water scarcity in Cuba by introducing innovative practices and enhancing knowledge, education and research capacities in innovative urban water cycle practices in the Cuban water sector.



WATER PROGRAMS IN HIGHER EDUCATION

Enhance the academic capacity to perform water programs at higher education institutes by supporting strategy development for water education and research, strengthen curricula as well as setting up research units that focus on water supply and sanitation, river and coastal engineering and hydrology and water resources.

CUBA

CARRIBEAN

COLOMBIA



PILOTING COLOMBIA'S NEW IWRM POLICY

Contribute to the development of a framework and specific tools through which Colombia's new basin management plans can be implemented. Facilitate the design and implementation of a Learning Alliance to effectively capture and communicate lessons learned from the programme. Support the implementation of awareness raising and the production of educational materials for primary schools.



ENHANCING INSTITUTIONAL CAPACITY IN WATER AND WASTE WATER TREATMENT

Enhance the capacity of the Department of Environmental, Water and Earth Sciences at Tshwane University of Technology to design, deliver and disseminate education and training programmes of high relevance for the water and sanitation sector.

CAPACITY DEVELOPMENT ACTIVITIES



EDUCATION & TRAINING

Fostering the competences of beneficiaries through local education and training activities, using standard or tailored course material, includes class-room teaching, workshops, e-learning, distance education as well as training and/or utilizing local trainers and lecturers. Study tours pay visits to learn from specific organizations or at project locations.



RESEARCH

Research activities involve MSc & PhD students, postdocs, researchers and experts from local knowledge and capacity-building institutes in projects to participate in the generation of new knowledge, thereby improving local capacity.



ADVISORY SERVICES

Advisory services are aimed at creating an enabling environment for local capacity development by providing specific guidance or advice, including needs assessments, curriculum development and the compilation of a strategy, policy or research agenda.

N CAPACITY DEVELOPMENT



NILE BASIN CAPACITY BUILDING NETWORK FOR RIVER ENGINEERING

Strengthen water professionals' capacity and collaboration in a region characterized by political tension, poverty and growing water scarcity through an inclusive knowledge network approach that has nodes at knowledge institutes in all Nile riparian countries.

NILE
RIVER
BASIN



HIGHER EDUCATION CAPACITY IN INTEGRATED WATER RESOURCES MANAGEMENT

Enhance capacity development at Chittagong University of Engineering and Technology by reinforcing its study, training, research and service/consultancy offer, focusing on integrated water resource management and disseminating knowledge, technology and expertise from innovators to practitioners, from classroom educators to field users.

BANGLADESH

LOWER
MEKONG
BASIN

KENYA
RWANDA
TANZANIA



PERFORMANCE IMPROVEMENT OF WATER UTILITIES

Improve the organizational performance, financial sustainability and urban pro-poor focus of three utilities in medium & small towns with respect to enhanced staff empowerment, performance accountability, customer voice and choice, operational efficiency, revenue enhancement and improved service provision to the urban poor.

SOUTH
AFRICA



ANTICIPATING AND RESOLVING FLOOD ISSUES, DIFFERENCES AND DISPUTES

Training programme tailored to three target groups (policy and decision makers, mid-level professionals and academics, and operation/administration professionals) who need to be knowledgeable of transboundary dimensions and implications of basin developments and flood management.



KNOWLEDGE NETWORKING & PARTNERSHIPS

Knowledge networking and partnerships foster competences by setting up networks, such as professional associations or Communities of Practice, whereby relevant professionals and organizations participate in a (thematic) network and its activities to disseminate and generate knowledge.

FOCUS



Technological competence



Management competence



Governance competence



Learning / Innovation competence

SCALE



Individual organization



Sector / Several organizations



Community / Civil society

CAPACITY DEVELOPMENT AND INNOVATION

Aside from the comprehensive education and training MSc and PhD programmes that participants can follow at UNESCO-IHE in Delft, the Institute is also very active in a broader range of capacity development activities world-wide. A small selection is presented in the centerfold of this issue of UPDATE. Currently, there are over 140 projects being carried out by the Institute that either focus specifically on capacity development or include capacity development components.

Capacity development by UNESCO-IHE consists of a range of different activities (education & training, research, advisory services and knowledge networks) that are aimed at distinct types of competences (technological, managerial, governance and learning/innovative competences). These projects are implemented with varying scope: focusing on individual organizations such as a ministry or a university (department), covering an entire sector or region, or even extending to entire communities or civil society, e.g. for awareness raising activities. There is not a single method, but a variety of approaches. Different capacity development activities are typically combined to create effective learning opportunities. The commonality among these is that the approaches are tailored to the requirements, priorities and preferences of the beneficiaries and the donors. UNESCO-IHE's role in this process can be multi-faceted: as educator, trainer, consultant and facilitator.

From research to the way that UNESCO-IHE carries out capacity development, the following insights emerge:

- Any capacity development activity assumes that some local capacity already exists. By means of a needs assessment, requirements analysis, benchmarking or local market research into the demand for certain training and education, this can be identified and then built upon.
- Capacity development activities are by and large carried out in collaboration with local partners. Since it can be tempting to become 'locked-in' by returning to the same local experts, it may require a conscious decision to ensure a good spread.
- Education and training activities using a variety of didactic methods to enable different forms of learning (e.g. learning-by-doing, e-learning, mutual learning, peer learning, on-the-job-training) not only contribute to enhancing the knowledge base - they are also important tools for building up the confidence of participants such that they can use their enhanced abilities in creative and innovative ways.
- The mere dissemination of textbook knowledge is considered unlikely to be self-sustaining, because it often results in 'dead' curricula. Learning mechanisms to generate new knowledge locally are deemed essential. Projects that include research activities involving local researchers and train capacity to prepare project proposals (how to analyze a problem, generate a research or project proposal and identify where to submit it) can help to address this problem.
- True bottom-up, rather than institutional top-down, ap-

proaches to knowledge networking are particularly suited to the process of knowledge production and dissemination. They connect water professionals by linking them through their professional interest and in this way result in collaboration among organizations and even countries. At this scientific level, a more neutral understanding of (e.g. trans-boundary) issues is often made possible than at a political level. Whilst information and communication technologies can play a great facilitating role, face-to-face meetings are considered indispensable for setting up and sustaining knowledge networks in the long term.

- Getting people to think broader, outside their own discipline, is deemed highly beneficial but difficult in practice. It has proved easier to link the often separate worlds of public sector agencies, knowledge institutes and the private sector by broadening the project scope and providing joint trainings, e.g. for local ministry staff and academics.
- Nation-specific incentive systems and norms can have a considerable impact on how and what participants learn. Public institutions can induce or hinder processes of national competence building. A good understanding of the institutional and political landscape is therefore essential for being able to provide effective capacity development activities.
- There is frequently insufficient local capacity in the social sciences, both in terms of quantity and quality. It can prove difficult to find contractors with social science departments in the beneficiary countries. This places limits on the attention that can be given to building the 'enabling environment' - and on the possibilities for innovative partnerships - for capacity development.

The key element emerging from this is UNESCO-IHE's appreciation that a focus on individual actors and organizations in the water sector is not sufficient. The development process to which knowledge and learning are central, depends on individual as well as collective qualifications and competencies. Along with the acquisition of technological and managerial competences, institutional and social innovation is required to create an environment that is stable and enabling to achieve the water-related ambitions of developing countries and countries in transition. This resonates with the importance placed by other sectors on dynamic interactive learning within and between organizations for bringing about success in innovative capacity development.