



Workshop Proceedings on Capacity Development in Agricultural Water Management

Moscow 2004



International Programme
for Technology and Research
in Irrigation and Drainage



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and Research in Irrigation and Drainage

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Workshop Proceedings
on
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in
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LIST OF ABBREVIATIONS

ACF	Agricultural Consultative Forum (Zambia)
AGL	Land and Water Development Division (FAO)
BCWUA	Branch Canal Water User Association (Egypt)
CBO	Community-based organizations
CWB	Canal Water Board
CDIAS	Central Department of Irrigation Advisory Service (Egypt)
CLUSA	The Cooperative League of the USA (Zambia)
DFID	UK Department for International Development
DWB	District water boards (Egypt)
DWMD	District Water Management Departments (Ukraine)
EPADP	Egyptian Public Authority for Drainage Projects
EWUP	Egypt Water Use Project
FAO	Food and Agriculture Organization of the United Nations
FID	Fayoum Irrigation Department (Egypt)
FWMP	Fayoum Water Management Project (Egypt)
GART	Golden Valley Agricultural Research Trust (Zambia)
GART	CHECK TEXT UKRAINE
GDP	Gross domestic product
GEF	Global Environment Facility
GIS	Geographic information systems
GOE	Government of Egypt (Egypt)
GoRZ	Government of the Republic of Zambia
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit (German Agency for Technical Cooperation)
ha	Hectare
H OCD	Heads of Central Department
IAS	Irrigation Advisory Service (Egypt)
ICID	International Commission on Irrigation and Drainage
IDE	International Development Enterprises (NGO)
IEC	International Executive Council
IFAD	International Fund for Agricultural Development
IFI	International Financial Institutions
IHEL R	Institute for Hydraulic Engineering and Land Reclamation (Ukraine)
IIIMP	Integrated Irrigation Improvement Management Project (Egypt)
IIP	Irrigation Improvement Project (Egypt)
IMT	Irrigation Management Transfer
IMS	Irrigation management systems

IPTRID	International Programme for Technology and Research in Irrigation and Drainage
IS	Irrigation Systems (Ukraine)
IWMI	International Water Management Institute
IWRM	Integrated Water Resources Management
JWMB	Joint Water Management Board
LWB	Local water board (Egypt)
MACO	Ministry of Agriculture and Cooperatives (Zambia)
MAFF	Ministry of Agriculture Food and Fisheries
MEWD	Ministry of Energy and Water Development (Zambia)
MLGH	Ministry of Local Government and Housing (Zambia)
MWRI	Ministry of Water Resources and Irrigation (Egypt)
NCC	Northern Crimean Canal (system in Ukraine)
NGO	Non-governmental organization
NIRS	National Irrigation Research Station (Zambia)
NRDC	Natural Resources Defence Council (Zambia)
OED	Operations Evaluation Department of the World Bank
PAM	Programme against Malnutrition (Zambia)
PIM	Participatory Irrigation Management (Egypt)
PRSP	Poverty Reduction Strategy Initiative World Bank (Zambia)
PWM	Participatory Water Management (Egypt)
RCTWS	Regional Centre for Training and Water Studies (Egypt)
SWOT	Strengths, weaknesses, opportunities, threats
TLC	Total Land Care (NGO)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
WB	Water board (Egypt)
WBP	Water Board Project (Egypt)
WG-CBTE	Working Group on Capacity Building, Training and Education
WP	Work packages (Ukraine)
WUA	Water user association
WUP	Water use project (Egypt)
ZNFU	Zambian National Farmers Union

Summary

BACKGROUND

A workshop in Montpellier held in 2003 by the International Commission on Irrigation and Drainage (ICID)/Food and Agriculture Organization of the United Nations (FAO) on Capacity Building in Irrigation and Drainage established the basic framework and principles of capacity development in the sector. The general consensus of the workshop was that a 'lack of capacity is constraining irrigation development in many developing countries and that capacity development rather than infrastructure should be the central focus of future irrigation development strategies'. It highlighted the need for a comprehensive capacity development strategy based on assessed priorities.

Under the leadership of the International Programme for Technology and Research in Irrigation and Drainage (IPTRID)/FAO, and as part of the activities of the ICID Working Group on Capacity building, Training and Education (WG-CBTE), a second more specific half-day workshop was organized in September 2004 in Moscow. The focus of this workshop was on Capacity Needs Assessment in Agricultural Water Management. The purpose was to develop a suitable methodology to assess capacity needs as a first step towards formulating broad capacity development strategies. The workshop brought together agencies and institutions working in this important field, to share knowledge of best practice and to develop common approaches for achieving the goal of capacity development for efficient and effective water management for agriculture.

PAPERS PRESENTED

The workshop was organized in three sessions in which a total of five papers were presented to about 25 participants. The papers included two conceptual, an overview and a strategic options paper as well as three case studies from Egypt, Ukraine and Zambia. In the following, summaries of the papers are given and highlights of the discussion provided:

Capacity Needs Assessment – Methodology and Process (Melvyn Kay, IPTRID consultant, Tom Franks, Chairperson of WG-CBTE and Sonia Tato, IPTRID)

The first paper introduces the process for assessing capacity following United Nations Development Programme (UNDP) guidelines, which present a good logical sequence of analytical steps. Broadly, capacity needs assessment evolves in stages starting with the existing capacity, assessing future capacity needs, mapping the capacity gaps, identifying opportunities for capacity development and defining objectives and targets as the basis for the formulation of a strategic plan of action. The proposed approach adopts a matrix framework, which is based on the principles of subsidiarity and participation. It analyses the capacity at three levels, of which the highest, the enabling environment, appears to be instrumental for a number of aspects including policy, legislation, socio-economic conditions and constraints to irrigation development. The middle layer addresses capacity needs of organizations involved in irrigation. The bottom layer aims at assessing the needs of individuals. The paper highlights a number of methodologies that are well established and useful for problem and stakeholder analysis and prioritization.

Discussion highlights:

- the long-term capacity development initiative was identified as a key feature that distinguishes it from infrastructure development projects;
- sectors other than irrigation and drainage offer valuable lessons such as health, water and sanitation, the environment; and
- important opportunities exist for experience exchanges in capacity building with training institutions such as the Regional Centre for Training and Water Studies (RCTWS), Egypt.

Strategic options for capacity assessment in agricultural water management: design and management of the process (Wilfried Hundertmark, IPTRID)

The second paper elaborates strategic options for the design and management of the process of capacity needs assessment with a particular focus on the situation in sub-Saharan Africa and much of

Asia. It moves away from an idealistic situation, in which stakeholders are collaborative and motivated and budgetary constraints do not exist, towards a world of restricted motivation and incentives and substantial resistance to institutional and organizational change. A country-driven approach is proposed and options for stakeholder involvement discussed. Considerable thought is given to the concept of capacity gap analysis, which must be assessed against the needs of the ultimate beneficiaries. Another issue addressed in the paper is the impact that a combination of insufficient motivation, human capital capacity and the absence of an enabling environment have on the performance of organizations. Resistance to anticipated change is identified as a major threat to any capacity needs assessment, especially in culturally diverse societies and institutions. Coping with resistance requires a strong profile in facilitation and excellent communication skills on the part of the actors.

Discussion highlights:

- the adoption of the concept of country self-assessment found broad support.
- there was broad appreciation of the points raised in the paper, particularly stakeholder involvement, capacity gap analysis; and
- benchmarking was mentioned as a concept that could incorporate relations between motivation, capability and enabling environment and performance.

Capacity needs in agricultural water management – experiences in Zambia, (Tom Brabben and Gez Cornish, HR Wallingford Ltd, UK)

The third paper is about entry points for capacity needs assessment in Zambia. The paper is based on a ten-day IPTRID mission in May 2004. The study highlights that growth and reinvigoration of irrigation requires proper and sustained attention to capacity development across a wide range of stakeholders. The project-based approach has provided important experience and capacity development for individuals but without long-lasting benefits to the institutions involved. Appropriate applied irrigation research still is needed but its possible contribution to the overall strategy implementation has to be demonstrated and fully integrated into extension systems that are demand-driven, client-oriented and based on identified needs and comparative advantages. The paper suggests several capacity development options that could support irrigated agriculture in Zambia while recognizing the importance of an integrated water resource management approach.

Discussion highlights:

- Zambia was selected because of the country's demonstrated link between an existing Poverty Reduction Strategy Paper, a comprehensive Agricultural Strategy and a recently developed Irrigation Sector Strategy and Policy. The existence of such strategies, even in draft format, are regarded as critical criteria for a country to engage in capacity development initiatives; and
- capacity needs assessment studies cannot be done within short-term interventions; to be successful, more time and a step-by-step approach are required; nationals are in the best position to carry out analysis; key for facilitating the right entry point are clarity of purpose and stakeholder interests.

Institutional mapping to assess capacity needs for the development of water boards at the district level in Egypt (Ibrahim Mohamed Mahmoud, Ministry of Water Resource and Irrigation, Egypt)

The case study from Egypt draws attention to an institutional mapping exercise, which was done to identify institutional gaps at the level of districts in Egypt. A clear picture of the various institutional functions and coverage is required to design water boards properly. The applied methodology is based on a matrix format in which the functions of existing institutions are mapped against administrative levels. Depending on the type of institution, the methods provide a map of the mandate areas of governmental and non-governmental institutions. The exercise is complemented by an analysis of job profiles of district officers from various Ministry sectors such as irrigation and drainage. The paper includes figures, which provide a visual impression of the way the institutional gap analysis is

subsequently used to design water boards. This remarkably enhances the clarity of institutional design principles.

Discussion highlights:

- participants congratulated the presenter on his excellent Power Point presentation, which facilitated an understanding of the subject considerably;
- interventions by several participants focused on the mode of stakeholder involvement and on the importance of a demand driven process; and
- awareness-raising of institutional reforms was seen as key to success. A case that seemed to work was reported from Ukraine where information centres were established to accompany institutional reforms.

Changes in irrigation water management: the need for capacity development in Ukraine (Catharien Terwisscha van Scheltinga, Alterra-ILRI, Wageningen, The Netherlands and Olga Zovtonog, Institute for Hydraulic Engineering and Land Reclamation of the Ukrainian Academy of Agrarian Science, Kiev, Ukraine)

This paper reports on the *Watermuk* Project in Ukraine, initially a technically oriented research collaboration between Ukraine and The Netherlands, which later broadened its scope from irrigation performance monitoring to socio-economic issues and action planning. The country's economic transition from central planning to market orientation was accompanied by a number of institutional problems, such as a lack of knowledge, limited investor confidence in irrigated agriculture, etc. The project identified capacity development as essential to removing such constraints and to creating an effective enabling environment. Proposed interventions include policy reform and legislative adjustment, human resource development (farmers, the private sector and government staff), development and strengthening of water user associations and training at all level from farmer to government officials.

Discussion highlights:

- given the broad scope of capacity development in Ukraine, there appears to be a need for a prioritization of interventions and a more focused plan of action; and
- it was acknowledged that the project could possibly benefit from methodologies proposed during the workshop.

THE WAY FORWARD

The workshop recognized the need for countries to be in the driving seat of a process, which must be based on the firm commitment of senior policy-makers linked to sector strategies as a whole. The process relies on proper facilitation and technical expertise from national and international sources. Mr Tom Franks, who chaired the workshop, concluded that it had contributed significantly to the progress of capacity development work began in Montpellier only a year ago. The assessment of capacity needs, as an important specific step towards the development of a country's capacity in irrigation and drainage, has become much clearer. He suggested that a similar far-reaching workshop be organized in 2005 to thereby continue the positive momentum.