Key Concepts

Multiple Use Water Services (MUS)

MUS Group meeting, hosted by Winrock
Washington, 19 – 20 January 2012
What is MUS?

• An **approach** to the development (new and rehabilitation) and management of water **services** that take people’s multiple **water needs** (domestic, productive) as starting point

• By changing the way **public sector agencies**, and other actors, finance, develop, regulate and support such services

• Turning the problem of undesirable or ignored *de facto* multiple uses into the solution of planning and design
Why MUS?

• More livelihood benefits and resilience: health, food, income, freedom from drudgery

• Cost-effective investments in multi-purpose water infrastructure
  – Potential to generate a wider basis of revenue for cost-recovery
  – Reduced risk of unsustainability of water systems, due to unplanned uses, anticipating competition between users

• Particularly in rural and peri-urban areas
MUS modalities: adding value to all water sectors

Domestic-plus: providing higher levels of service to homesteads

Irrigation-plus: providing water to crops in fields and for other uses

Self-supply: Users decide by obtaining (individual) infrastructure for any use

Community-based MUS: users decide through participatory planning of public support, integrating multiple sources
Domestic-plus

Characteristics
- Providing higher levels of service, for new infrastructure, or in expansion and rehabilitation
- Strengthening community management
- Add-ons, like cattle troughs, community gardens
- Ensuring water quality for those uses that need it

How to:
- Structured planning approach
- Bringing in livelihoods perspective in all phases of the project cycle
Examples

• Adding nutrition component to WASH projects with point sources, e.g. UNICEF Ethiopia

• Productive use of water in gravity-fed piped schemes, in Nepal and Latin America

• Increasing service levels, Ghana
Irrigation-plus

Characteristics

• Providing water services for other needs than crop production through infrastructure adjustments and management reforms
  – Add-ons to improve access, e.g. cattle ramps
  – Provision of water in bulk for formal drinking water supplies
  – Conjunctive use of groundwater and surface water

How to:

• MASSMUS methodology (FAO) for large canal irrigation schemes
  – Assessing multiple uses of water in schemes, and the value generated through these
  – Recognise and address these in canal modernization efforts and management reforms
Example: Krishna Western Delta (India)

Canal irrigation supplies domestic water for millions of people through:
- Bulk supply to towns and cities
- Conjunctive use of ground water
- In-stream uses

Assessing these to address them in modernization plans
Self-supply

- Users invest in climbing the ladder through:
  - technology development
  - supply chain and market development
  - financing facilities & subsidies
  - enabling policy environment
Community-based MUS

- Participatory planning in holistic water projects or water components in participatory programs
- Own priorities for sustainability
- Empowering communities linked to local government
- Holistic local allocation
- Efficiencies and resilience of combining multiple sources
- ‘Bottom-up IWRM’
Examples

Water specific:
• Water Use Management Plan Nepal
• IWRM Demonstration projects Southern Africa

Water components in participatory rural development:
• National rural employment guarantee scheme, India
• Community-driven Development (CDD) Projects