

Multiple-Use Water Services for the Poor

Overview of Winrock Activities & Key Learnings

Winrock International

MUS Group Meeting

Washington, DC (Winrock offices)

January 19, 2012



Overview of MUS activities

1. Research and advisory services
2. Implementation
3. Awareness and Capacity building
4. What We're Learning

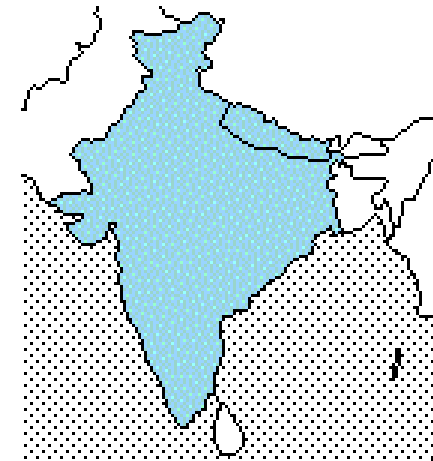
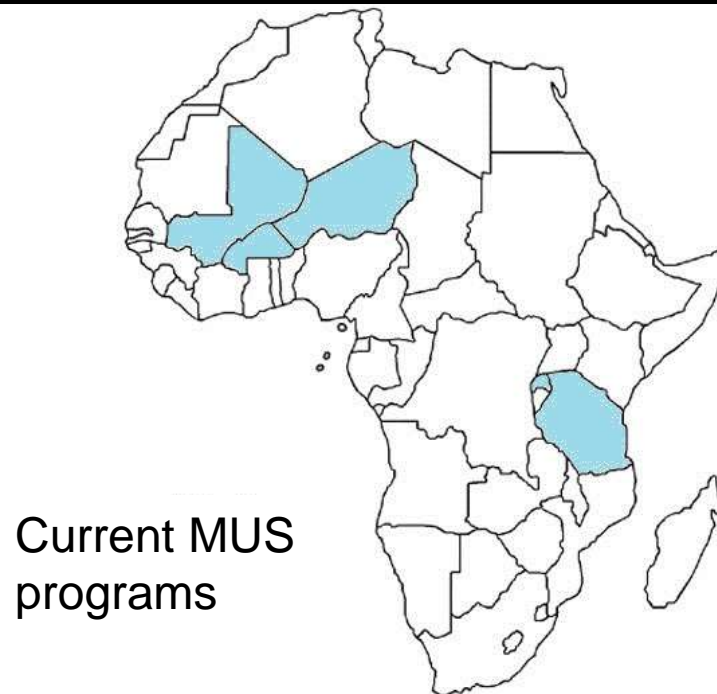


Where We're Working

Africa: Niger, Tanzania, Rwanda, Burkina Faso, Mali

Asia: India and Nepal

Global: scoping studies, advisory services, training



1. Research & Advisory

- Potential for Impact: Scoping study for Bill and Melinda Gates Foundation
- MUS Learning Initiative: Rockefeller Foundation

Bill and Melinda Gates Foundation

Multiple Use Water Services for the Poor: Assessing the State of Knowledge

Final report

December 2007

Winrock International

IRC Water and Sanitation Centre

International Water Management Institute

A large, bright yellow starburst graphic with a dark blue outline, positioned on the right side of the slide. It contains text about the report's availability online.

It's on the internet:
www.winrockwater.org



Comparing Single- versus Multiple-Use

| | |
|--------------------|---|
| Key Findings: | Strategic investments in multiple-use services can cost-effectively maximize poverty impacts of water services while enhancing sustainability |
| Potential Clients: | Over 1 billion people |
| Where: | Rural South Asia and sub-Saharan Africa |
| How: | New domestic multiple-use services Upgrading service levels within existing domestic and irrigation systems |

Impact on income:

- \$25-\$70 / capita / yr *net*
- Additional \$125-\$350 / yr for family of 5
- Above 20 lpcd, each additional lpcd generates \$.5
\$1 / yr of income



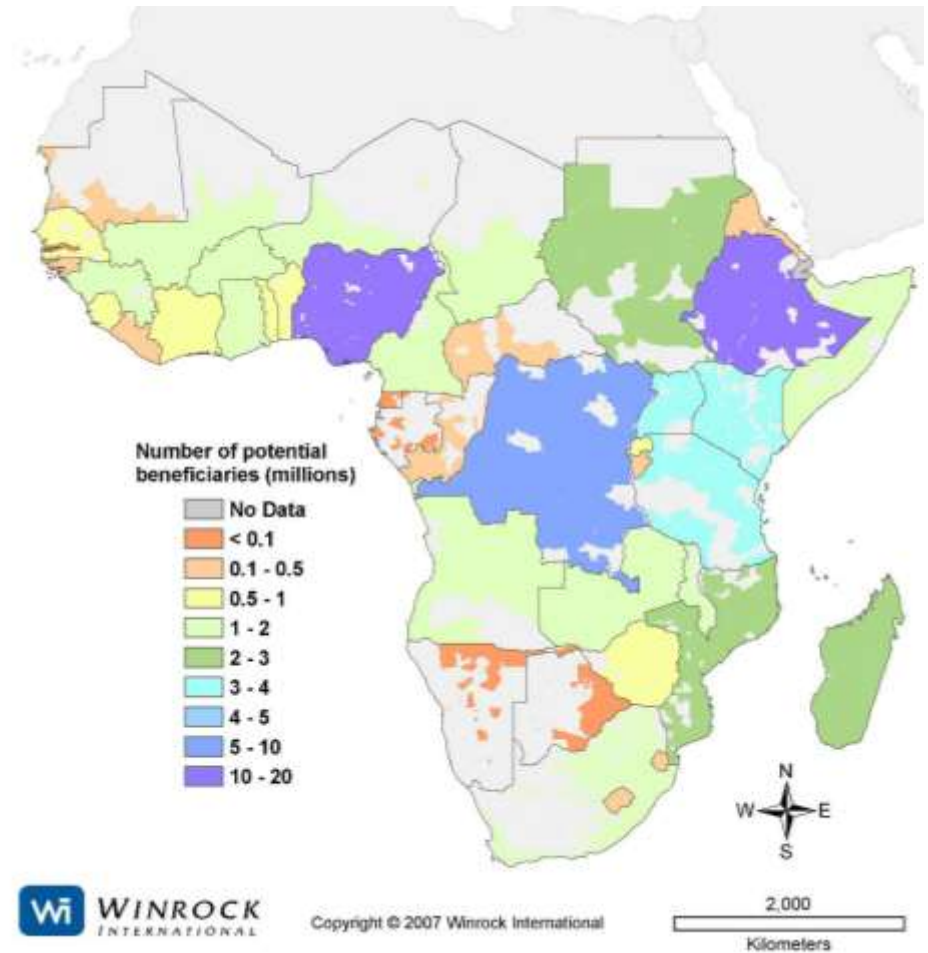
Non-financial poverty impact:

- Health
- Food security and nutrition
- Reduced vulnerability and diversification of livelihoods
- Social equity and empowerment



Who are the potential beneficiaries?

- Over 1 billion potential clients
- 5 Opportunity Areas
- Scalable



MUS Search Work: Rockefeller Foundation

How

to design and implement MUS?

Where

to implement MUS?

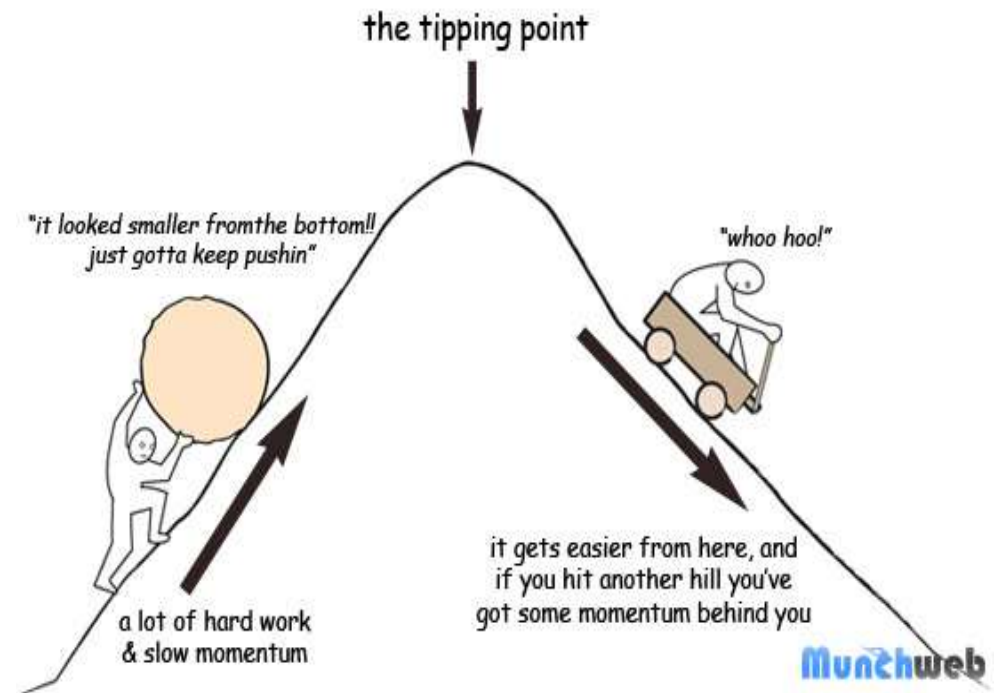
What

is needed to catalyze scale-up?

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Focus on the tipping point ... catalyze self-sustaining adoption leading to a paradigm shift

- Champions
- Observable results
- Training and Tools

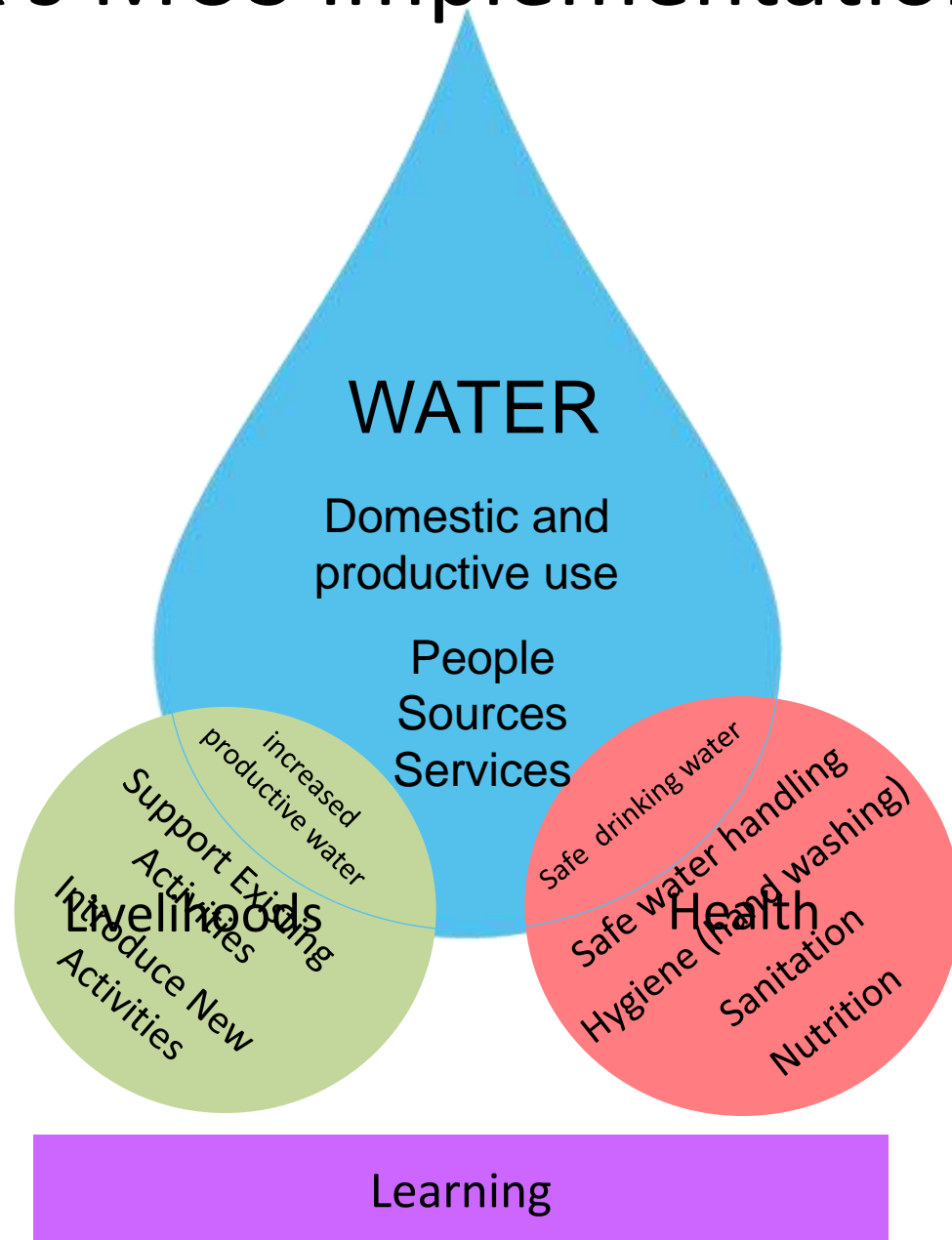


2. Implementation

- Overview of Winrock Implementation Model
- Countries
- Examples: Nepal and Niger



Winrock's MUS Implementation Model



| Country/ Program | Clients (beneficiaries)* | Target | |
|------------------|-----------------------------|--------|------|
| | | HH | Comm |
| Nepal | 12,500 | | x |
| India | 7,250 | | x |
| Tanzania | 68,000 | x | x |
| Rwanda | 80,000 | | x |
| Niger – WAWI | 13,500 | | x |
| Niger—WA-WASH | 10,000 | x | x |
| Burkina Faso | 22,000 | x | x |
| Mali | 5,000 | x | x |

* Estimated based on actual and targets (for ongoing programs). Excludes self-supply.

Collaborative Partnerships

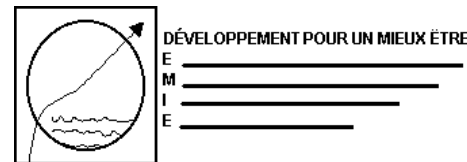
Funders



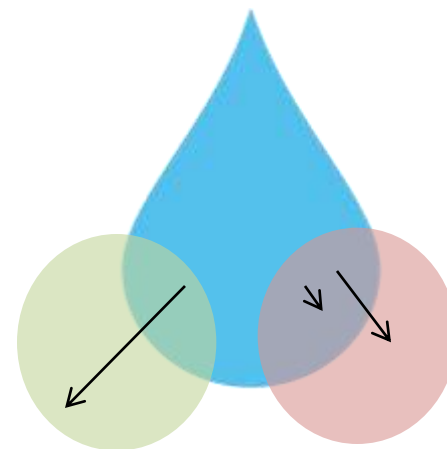
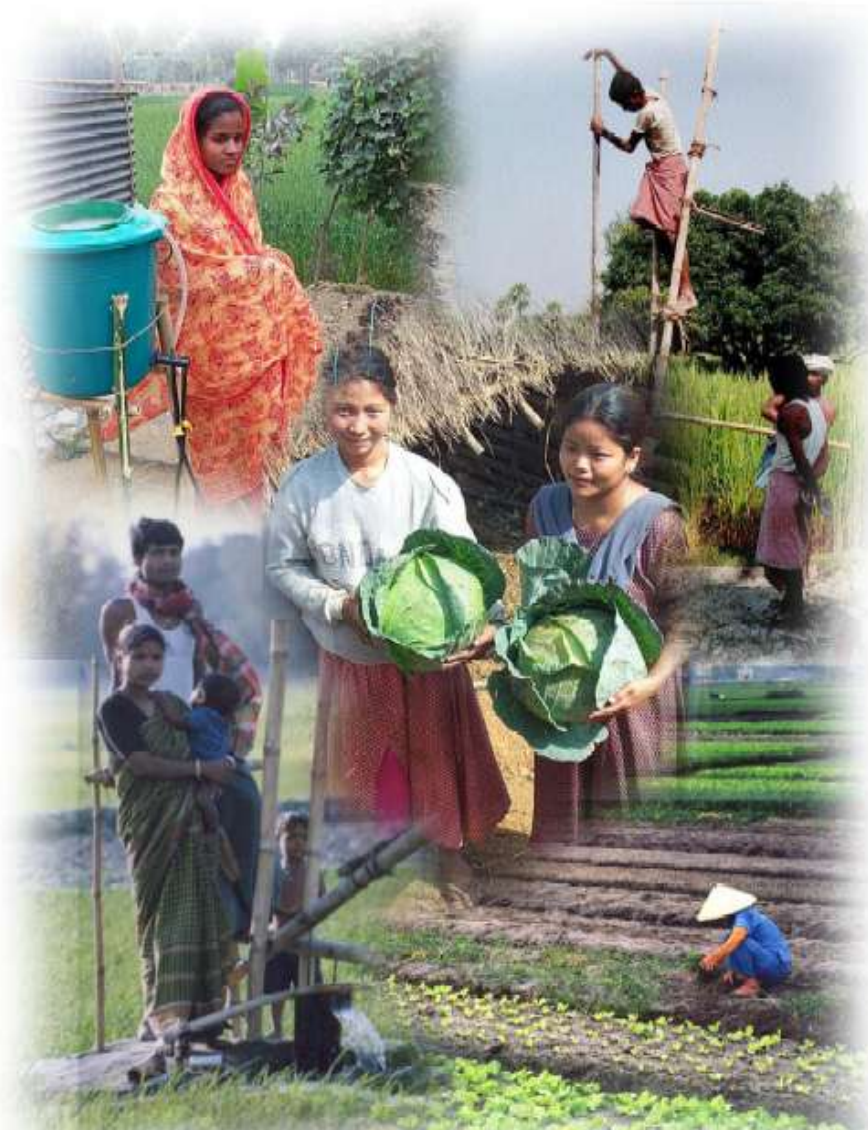
BILL & MELINDA GATES foundation



Partners



MUS Nepal



Smallholder Irrigation Market Initiative (SIMI) and Education for Income Generation (EIG) with primary funding from USAID, implemented by Winrock, IDE, CEAPRED, SAPPROS, and AEC in close partnership with the government.

Nepal – Single Source

Water

Hardware: Single source for multiple uses
New systems

Software: Community management

Livelihoods

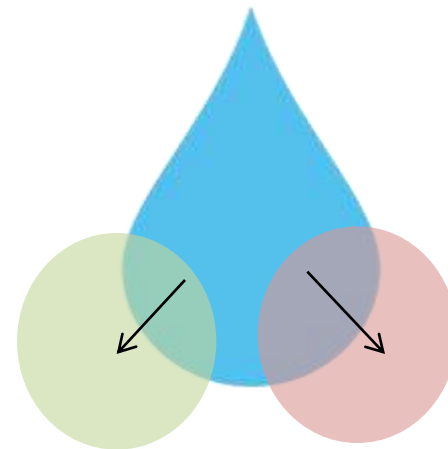
Horticulture: Across value-chain

Health

Hygiene (EIG only)



MUS Niger



Water for Health and Wealth: Multiple-Use Water Services with primary funding from USAID and Coca Cola implemented by Winrock, CRAC-GRN and Demi-E in close partnership with local enterprises and the government.

Niger – Multiple Sources

Water

Hardware: Multiple sources for multiple uses

Mix of new systems and rehabs

Software: Mix of community and private management

Livelihoods

Horticulture and aquaculture: moderate

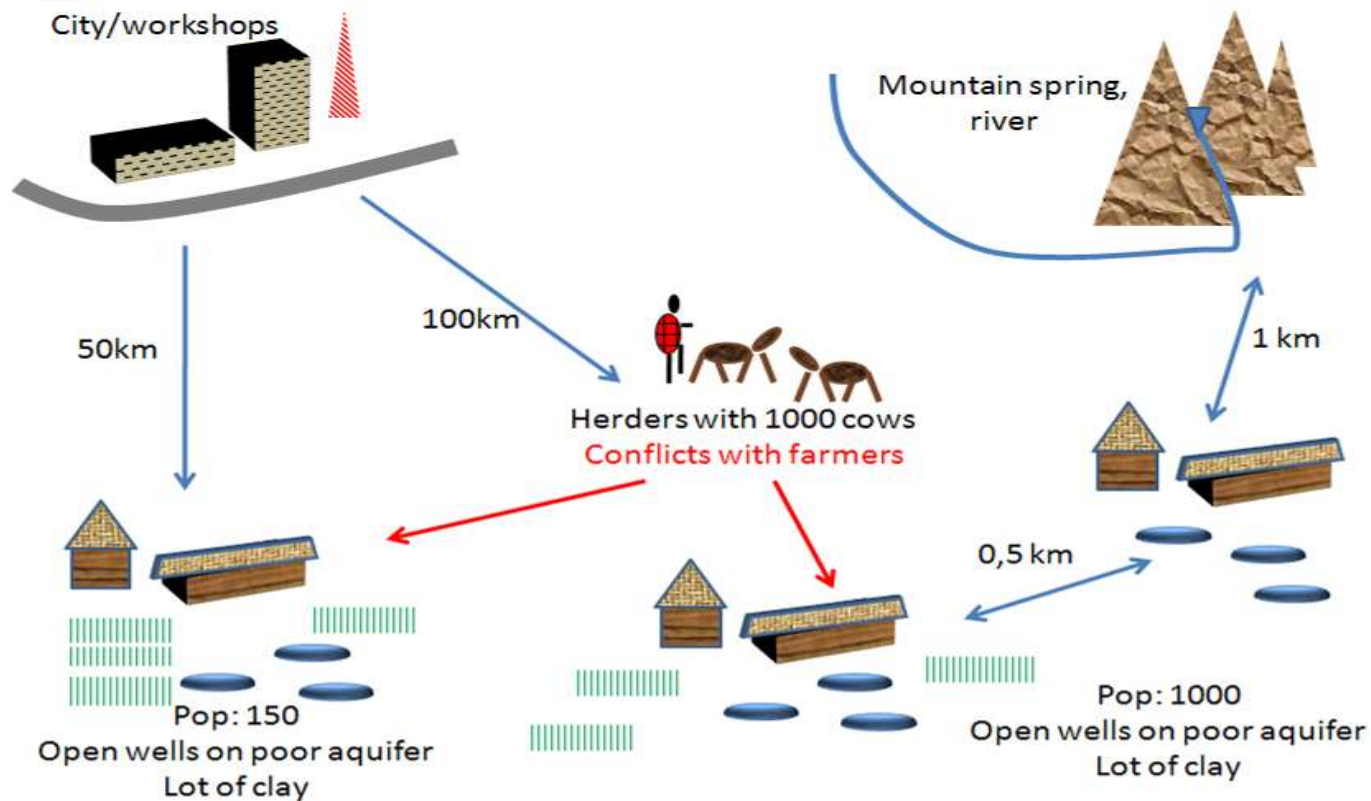
Health

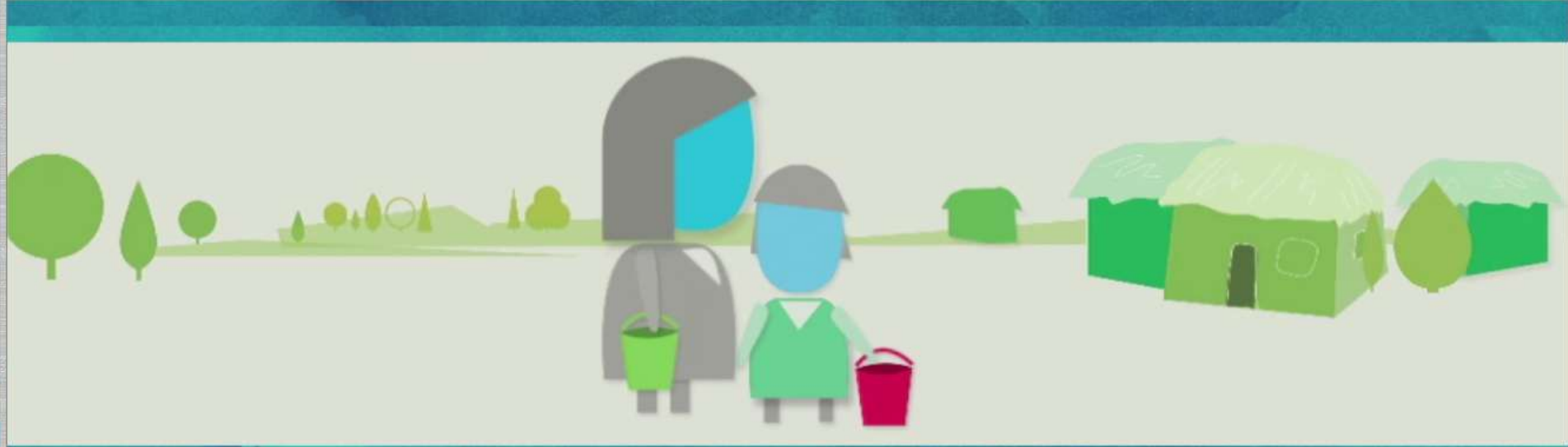
Hygiene (PHAST): handwashing focus



3. Awareness and Capacity Building

- Animated Video
- Guide to Implementing MUS
- MUS training program





WATER FOR DRINKING

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HOW IT WORKS.

LOOK AT PEOPLE'S NEEDS



What uses do people have for water?
Where do they use water?
How much water is needed for each use?
What quality do they need for each use?

LOOK AT WATER SOURCES



What sources are available?
Where is each source?
What is the quality of water from each source?
How much water can be sustainably used from each source?



CREATE WATER SERVICES TO IMPROVE HEALTH & LIVELIHOODS

Can the sources be transformed to better meet water needs?
What types of training and management can support the water services?



How can the health benefits of water services be optimized by adding hygiene, sanitation or nutrition activities?



How can the livelihood benefits of water services be optimized by adding support for water-related livelihoods activities such as livestock, crops and enterprises?

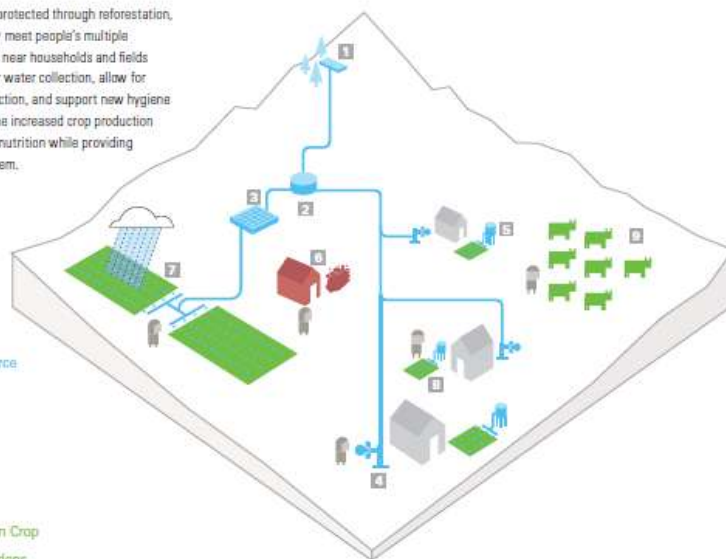
BEFORE

A distant and deteriorating unprotected spring is creating a variety of health problems in the community and limiting gardening opportunities. Hygiene and sanitation practices are poor. Deforestation is causing the source to dry up, and long travel times to fetch water are further impeding people's ability to produce food and earn a living.



AFTER

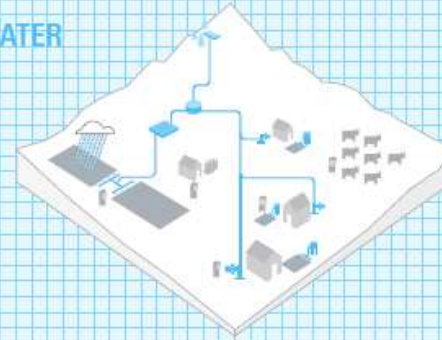
Now that the watershed is protected through reforestation, the source will more reliably meet people's multiple needs. Tap stands installed near households and fields reduce the time required for water collection, allow for off-season vegetable production, and support new hygiene and sanitation programs. The increased crop production improves food security and nutrition while providing income to maintain the system.



- 1 Protected Water Source
- 2 Village Water Tank
- 3 Agriculture Tank
- 4 Tap Stand
- 5 Drip Kits
- 6 Hygiene Promotion
- 7 Rain-fed + Off-Season Crop
- 8 More Household Gardens
- 9 Increased Livestock

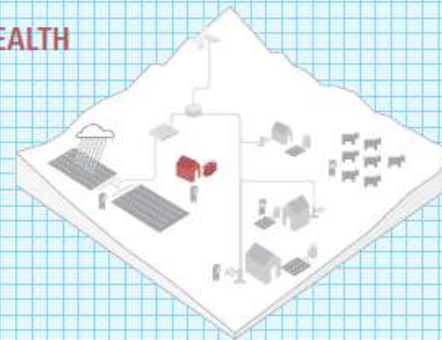
IN MORE DETAIL

WATER



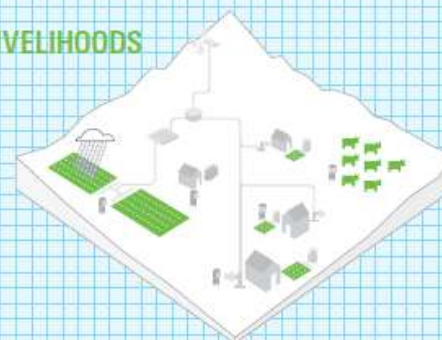
- Covered spring and closed reservoir protect drinking water from contamination.
- Watershed protection increases water supply, improves year-round reliability and ensures long-term sustainability.
- Tap stands near households greatly reduce time fetching water.
- Conflict is reduced by prioritizing household needs in water distribution.
- Increased income from gardening used to maintain system over time.
- Sustainability of water services enhanced by establishment and training of management committee.
- Support for supply chain of micro-irrigation technologies and gravity-system replacement parts.

HEALTH



- Safe water, hygiene awareness, and more handwashing reduce diarrheal disease.
- Increased adoption of latrines due to increased water availability and sanitation promotion.
- Nutrition improves from vegetable consumption.

LIVELIHOODS



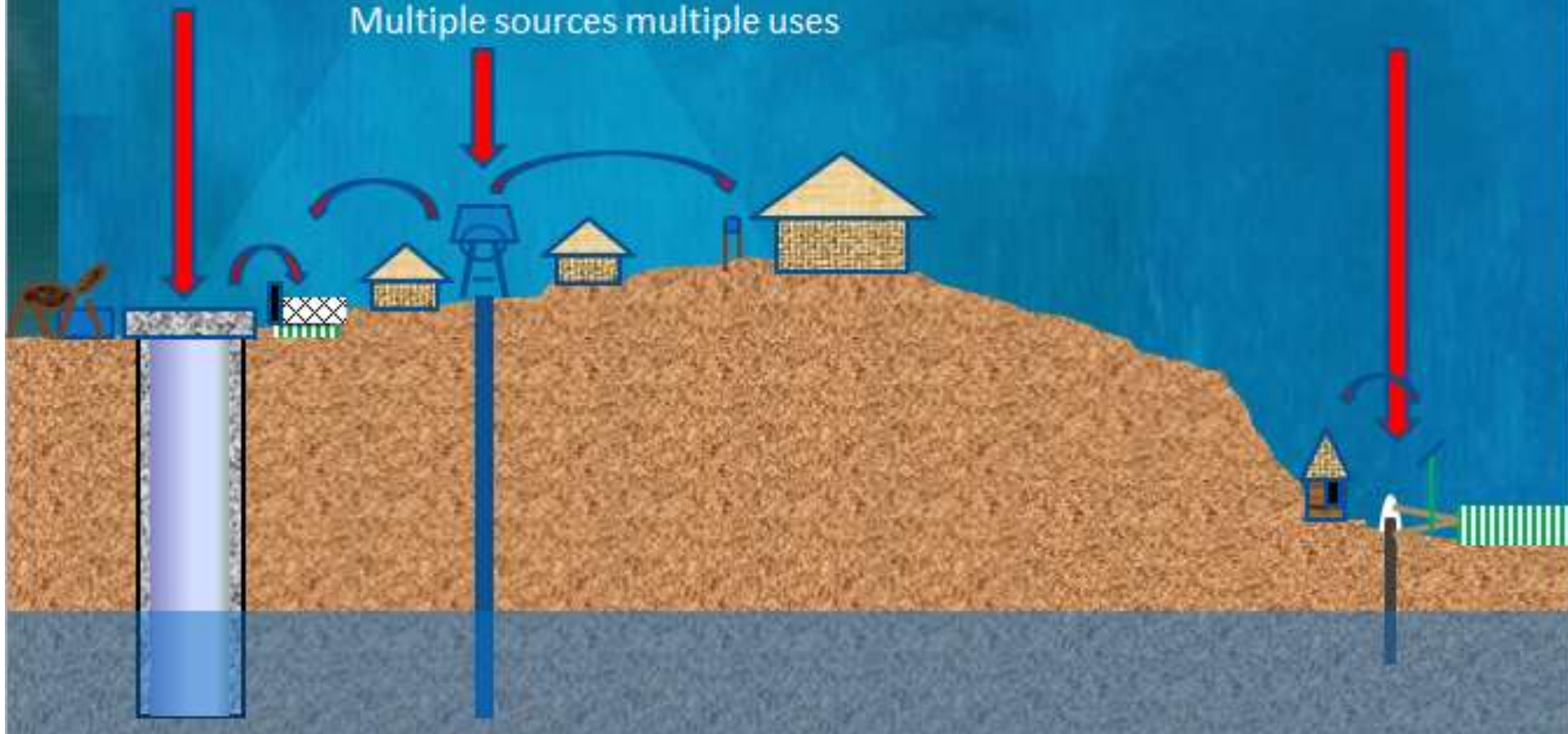
- Women's household gardens are converted to high-value crops due to increased access to water, drip irrigation kits, agricultural extension and marketing.
- Off-season water efficiency in fields is improved through micro-irrigation technologies.
- Income and food security are improved for households.
- Time saved from water collection can now be used for gardening.

Technology choices and combinations:

(inspired by Niger example)

Diversification by improving the scope of sources:
Multiple sources multiple uses

+ software!



4. Snapshot of what we've learned

- Significant potential for impact
- Achieving impact (benefits): water –plus – supporting programs
- Need to enhance “robustness” of MUS approach
 - Agreed upon principles and practices
 - Adaptable implementation models for different context
 - Standardize performance indicators (what does “good” look like?)
- Water—looking at multiple sources, traditional sources overlooked
- Challenges of working in single-sector world (funding, timelines, line ministries)
- Implementation challenges
 - Managing several things at once: importance of critical pathway; delineated programs
 - HR requirements
 - Setting reasonable targets

Overview of Winrock MUS Programs

| Country/ Program | Clients (beneficiaries) * | Target | | Water | Health | Livelihoods |
|---------------------|---------------------------------|--------|------|------------------|--------------------------------|---|
| | | HH | Comm | | | |
| Nepal | 12,500 | | x | Single source | | Horticulture |
| India | 7,250 | | x | Multiple sources | Modest hygiene awareness | Kitchen gardens, irrigation, laundry |
| Tanzania | 68,000 | x | x | Multiple sources | CLTS/PHAST | Livestock, horticulture |
| Rwanda | 80,000 | | x | ? | ? | ? |
| Niger – WAWI | 13,500 | | x | Multiple sources | Hygiene awareness; handwashing | Horticulture—market, home cons; aquaculture |
| Niger—WA-WASH | 10,000 | x | x | Multiple sources | Hygiene awareness; handwashing | Horticulture—market, home cons; |
| Burkina Faso | 22,000 | x | x | Multiple sources | Hygiene awareness; handwashing | Horticulture—market, home cons; |
| Mali | 5,000 | x | x | Multiple sources | Hygiene awareness; handwashing | Horticulture? |

* Estimated based on actual and targets (for ongoing programs). Excludes self-supply.