

Costs and benefits of multiple use water services: a case from Eastern Ethiopia

MUS Group Meeting Oegstgeest 22-26 Feb. 2010

- A study on Multiple use of water was conducted in Oromia Region Eastern Hararghe, Goro Gutu wereda/Ethiopia
- Study Goal: Input to inform prospective water sector investments assess the potential of multiple-use water services to sustainably meet the water needs of the rural people
- Objective: To provide a better insight in the costs and benefits of going up the water service ladder

Action Research Framework

Multiple use water services

Perceived quality: M Accessibility: M Reliability: H

Perceived quality: H Accessibility: H Reliability: H

Multiple use water services

Single use water services

Domestic water services

Use: 37 l/hh/day Water Supply Dath (Domestic +) Perceived quality: M Accessibility: M

Reliability: H

Initial situation

> No formal water services

Use: 20 I/hh/day Perceived quality: L Accessibility: L Reliability: M

Irrigation water services

Use: 34 l/hh/day Perceived quality: M Accessibility: M Reliability: H

> No formal water Services

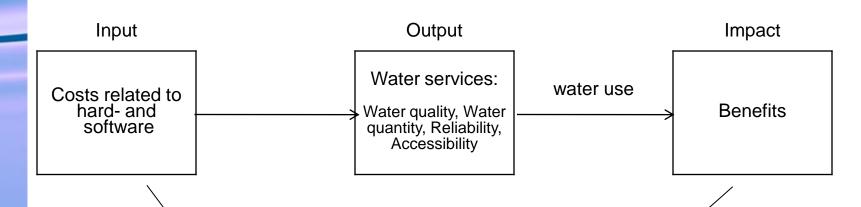
Use: 30 l/hh/day Perceived quality: L Accessibility: L Reliability: M

Ido Jalala Spring with discharge of 0.4 l/s 70 households

Ifa Daba Spring with discharge of 1.4 l/s 121 households



Cont...



Costs taken into account

- Capital investment costs in assets (CapIn), from the implemented and from the community
- Operating and minor maintenance expenditure (Opex)
- Support costs (SupCo)

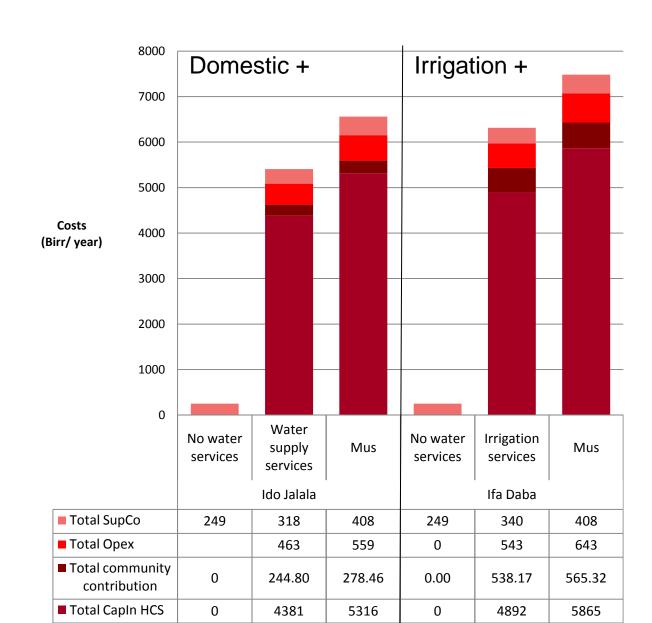
Benefits taken into account

- Health benefits
- Time saving benefits
- Irrigation benefits
- (livestock benefits)

Additional non Financial Benefits

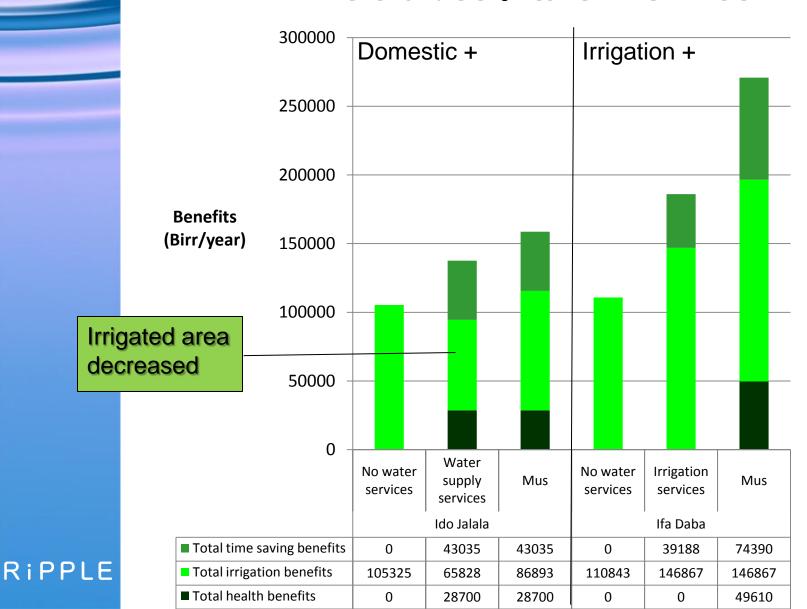
Food security and nutrition
Diversifying livelihoods and reduced
vulnerability
Social equity and women empowerment

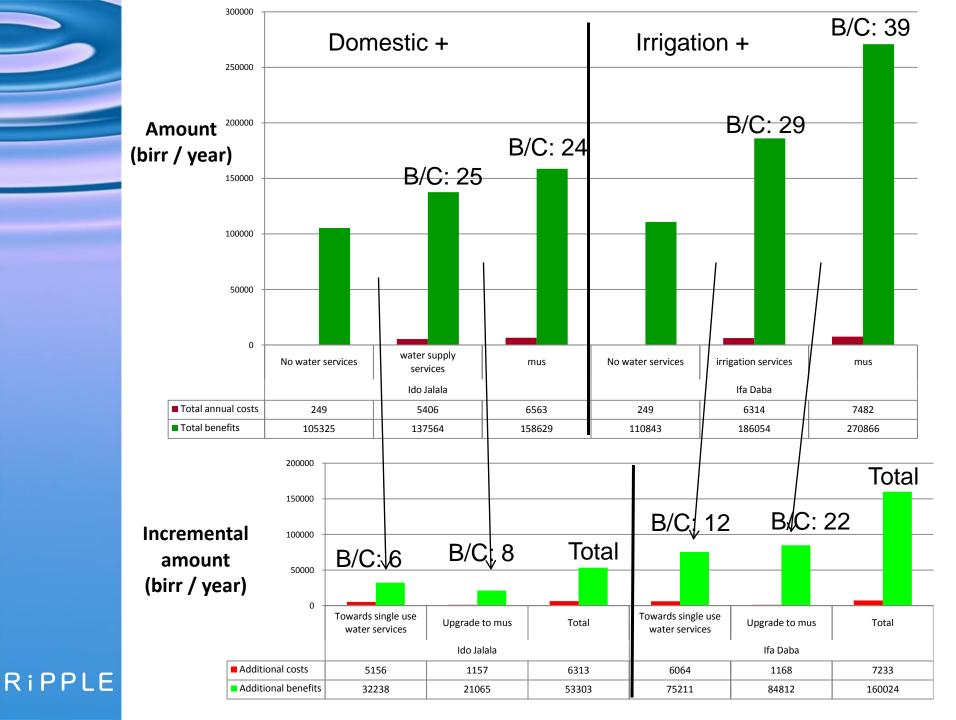
Costs





Results: benefits







- Multiple use services cost more but generate greater income
- Introducing single use water services can have impact on the multiple uses of water
- Limited water availability at the source means that different water uses might compete with each other
- The benefit/ cost ratio high for mutiple use systems (in case of spring systems)
- In case of spring systems, the benefits of going from irrigation services to multiple use services (irrigation +), are high compared to the costs

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Ethiopia towards Integrating MUS in Policy and Practices



- Action research (cost benefit, sustainability, inventory, etc)
- Presentation of finding to local, regional, national levels and CSOs and other networks
- Sharing other information in resource center for the regional level decision makers
- Work with the national level UAP strategy development team and inventory
- Work with the actual implementers at grassroots level (HCS)





- National: FLoWS, Networks, senior level meetings, CSO
- Region: Policy level meeting, LPA,
- District and community level:-CSO implementers and facilitators, WASHCOs, development agents



MUS

- Achieving the UAP which focuses on self supply
- Adaptation to climate variability
- Sustainability
- sector integration harmonization

Discussion with the policy makers



National and regional Policy level

- Reflection in the A-UAP
- Invitation of CSO for presenting on MSF and regional LPA
- National team for inventory campaign (MUS consideration in the baseline)
- National research strategy development for the ministry and will not focus on single use





- Staff full recognition of the low cost upgrading and meeting multiple needs
- Training to all partner staff on the findings and MUS integration
- Staff of partners and government training and discussion on MUS options
- New funding proposal by RAIN





- Equity
- Natural resource management and climate variability
- Drought and flood
- Understanding of MUS and sector integration
 - Big irrigations shifted focus to farming in pastoralist areas(single productive use but limited access of water for animal and human)





- Documentation of cases and evidences
- Undertake further action research including MUS vs climate variability
- Regular M&E using the established indicators on processes, outcomes and impacts
- Regional focal for MUS group and follow up
- Creating linkage to research institutions and universities
- Resource center development for MUS other related sectors



Thank You