Benefits of MUS on Livelihoods and Sustainability of Drinking Water Schemes

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PRESENTATION HIGHLIGHTS

BACKGROUND INFORMATION-MID & FAR WEST HILLS

DEFINING MUS

MUS in RVWRMP

MUS BENEFIT CHAIN

MUS INCOME & PERFORMANCE TREND

FUNCTIONALITY-MUS vs DWS

BENEFITS OF MUS

LIMITATIONS & RECOMMENDATIONS
Always fighting the challenges of remoteness, rugged terrain, food insecurity, water scarcity, climate change and the post-conflict legacy.

Poverty from 64.1% (Bajura) to 33.6% (Kailali) against national average poverty rate of 25.16%

Of the total HHs, 18% in Mid and 31.2% in FWDR are dependent on leasehold land for basic food security.

Source: HDIN, UN 2011; NLSS 2011; MoAD Nepal website
<table>
<thead>
<tr>
<th>District/ Region</th>
<th>EDIBLE PRODUCTION (metric tons - mt)</th>
<th>Total edible</th>
<th>Requirement</th>
<th>Balance (+,-)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rice</td>
<td>Maize</td>
<td>Wheat</td>
<td>Millet</td>
</tr>
<tr>
<td>Bajura</td>
<td>4119</td>
<td>933</td>
<td>5173</td>
<td>2115</td>
</tr>
<tr>
<td>Bajhang</td>
<td>11171</td>
<td>3366</td>
<td>17327</td>
<td>1662</td>
</tr>
<tr>
<td>Darchula</td>
<td>5976</td>
<td>7741</td>
<td>10820</td>
<td>627</td>
</tr>
<tr>
<td>Far west Mountain</td>
<td>21265</td>
<td>12040</td>
<td>33319</td>
<td>4404</td>
</tr>
<tr>
<td>Achham</td>
<td>16878</td>
<td>4951</td>
<td>19196</td>
<td>2680</td>
</tr>
<tr>
<td>Doti</td>
<td>12298</td>
<td>680</td>
<td>27475</td>
<td>4707</td>
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<tr>
<td>Baitadi</td>
<td>7715</td>
<td>11858</td>
<td>19388</td>
<td>741</td>
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<tr>
<td>Dadeldhura</td>
<td>8911</td>
<td>4211</td>
<td>15411</td>
<td>210</td>
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<tr>
<td>Far West Hills</td>
<td>45802</td>
<td>21700</td>
<td>81470</td>
<td>8338</td>
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</tbody>
</table>

Source: MoAD, GoN (Statistical information 2012/13)
Multiple-use water services (MUS) describe a participatory, integrated, and poverty-reduction focused approach that takes a community’s diverse water needs as the starting point for providing services.

Multiple-use water services move beyond the conventional sectoral barriers of the domestic and productive sectors and provide for all water needs in a community.

Source: International Development Enterprises (IDE), the Challenge Program on Water and Food (CPWF), and the International Water Management Institute (IWMI)
MUS in R V W R M P

A community based system that is demand driven (Water Use Master Plan) and meets water needs integrating it with safe drinking water, irrigation and energy or any two of the above systems ensuring productive use for better livelihoods and sustainability.
Waste water use

SAFE DWS

DWS

Non-conventional

Conventional

End use of electricity

MHP/Enrgy

MUS

Irrigation

Vegetables-se/off

Tree crops

Micro enterprises

Climate smart Intervention

Food & Nutrition security

Income generation

Operation & Maintenance

Livelihood Improvement

MUS BENEFIT CHAIN
INCOME GENERATION WITH MUS-DEC 015

<table>
<thead>
<tr>
<th></th>
<th>Chhapari</th>
<th>Koiralakot</th>
<th>Pouwagadi</th>
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</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>100000</td>
<td>10000</td>
<td>3000</td>
</tr>
<tr>
<td>Maximum</td>
<td>200000</td>
<td>150000</td>
<td>30000</td>
</tr>
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</table>

Source: LPs/LFs
TREND ANALYSIS OF AVERAGE INCOME IN MUS

Source: LPs/LFs
PERFORMANCE OF MUS

Supply driven

DDC/RVWRMP’s interest

Demand driven (WUMP)

Income range

FY 2012/13  FY 2013/14  FY 2014/15

Chhapar
1,150,000

Koiralakot, 60,000

Pouwagadi, 50,000
# Functionality Status – MUS vs DWS

<table>
<thead>
<tr>
<th>VDC</th>
<th>Name</th>
<th>Fully functional</th>
<th>Regular Tariff</th>
<th>Payment to VMW</th>
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</thead>
<tbody>
<tr>
<td>Chhapari</td>
<td>Danda MUS</td>
<td>Yes</td>
<td>yes</td>
<td>Cash</td>
</tr>
<tr>
<td>Koiralakot</td>
<td>kalipachi MUS</td>
<td>Yes</td>
<td>yes</td>
<td>Cash</td>
</tr>
<tr>
<td>Pawagadhi</td>
<td>Khairadi MUS</td>
<td>Yes</td>
<td>yes</td>
<td>Cash</td>
</tr>
<tr>
<td>AJAYMERU</td>
<td>Gharkatte DWS</td>
<td>No</td>
<td>No</td>
<td>Cash</td>
</tr>
<tr>
<td>ALITAL</td>
<td>Hamtad DWS</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>ASHIGRAM</td>
<td>Chira DWS</td>
<td>No</td>
<td>No</td>
<td>Kind</td>
</tr>
</tbody>
</table>

Source: Endline survey
BENEFITS OF MUS

- Ownership within the community realized
- Crop diversification & intensification
- Increase in greeneries-fruits, fodder, NTFPs
- Technology promotion-local resource utilization
- More income
- Support to food security and nutrition
- Regular operation and maintenance
BENEFITS OF MUS

Employment opportunities created

Harmony among stakeholders increased
M U S & H O M E G A R D E N

at least
Vegetables
Spices
Fodder
Fruits
& THUS MUS IS ‘GOD’
LIMITATIONS / CHALLENGES

Supply driven MUS demands input again and again

Same system demand in other communities

Overflow of resources distribution for publicity

Challenge in sustaining micro enterprises

System management requires more attention
RECOMMENDATIONS

MUS should be in the priority of GoN—could it be even basic MUS.

MUS to be implemented only on demand basis

Strong coordination among stakeholders needed before implementation

Very strong system management mechanism to be developed

Capacity building—technical and managerial HRs
THANK YOU