IFAD’s experience in water management for smallholders

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- International Fund for Agriculture Development (IFAD) is a specialized UN agency – the only agency that is also an International Finance Institution.

- One of the 3 Rome-based UN agencies, together with FAO and WFP.

- Strategic vision of inclusive and sustainable rural transformation is one in which: poor rural people and communities are empowered to build prosperous and sustainable livelihoods;
Global changing context impacting on smallholder agriculture

- World is becoming more urban – by end 2025: More markets for rural farmers.
- Intense competition for natural resources: Rethink current management practices, especially for irrigation water.
- Increased role of the private sector: need new models that leverage on private sector skills, knowledge and finance.
- Availability of low cost technology and internet: rapid diffusion of information and adoption rates remote areas.
- Extreme weather events due to climate variability and change: diversify cropping patterns, rethink risk management.
- Increased migration: opportunity for increased remittances to rural areas.

Rural Development Report 2016: Fostering Inclusive Rural Transformation

- Rural transformation is a process in which:
  - Better access to services and infrastructure
  - Expanded off-farm employment and opportunities
  - Rising agricultural productivity
  - Increasing marketable surplus
  - Capacity to influence policy lead to improved rural livelihoods and inclusive growth

https://www.ifad.org/pub/rdr
Water security: Single most important risk factor

About 80% of country strategies recognize water security as one of the biggest risk factor to food and nutrition security and sustainable increase in incomes for rural communities.

» Water availability
» Water quality
» Water accessibility

And that climate change is making it worse:

Floods
Droughts

IFAD Global Investments in Irrigation water management
IFAD financed projects with water management components

<table>
<thead>
<tr>
<th>Water resources management</th>
<th>Number projects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>57</td>
<td>25%</td>
</tr>
<tr>
<td>Planning/investments</td>
<td>104</td>
<td>45%</td>
</tr>
<tr>
<td>Management/allocation</td>
<td>115</td>
<td>50%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Investments in water uses</th>
<th>Number projects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>130</td>
<td>56%</td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rainfed</td>
<td>124</td>
<td>54%</td>
</tr>
<tr>
<td>Irrigation</td>
<td>147</td>
<td>64%</td>
</tr>
<tr>
<td>Livestock</td>
<td>138</td>
<td>60%</td>
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<tr>
<td>Inland Fisheries and aquaculture</td>
<td>49</td>
<td>21%</td>
</tr>
<tr>
<td>Agro-processing</td>
<td>117</td>
<td>51%</td>
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<tr>
<td>Environment and biodiversity</td>
<td>75</td>
<td>32%</td>
</tr>
<tr>
<td>Leisure</td>
<td>11</td>
<td>5%</td>
</tr>
<tr>
<td>Cultural</td>
<td>8</td>
<td>3%</td>
</tr>
</tbody>
</table>

Key lessons from projects

- **Capacity building and empowering local institutions.** Balance “hardware” and “software” investments.
- **Incentivise smallholder producers through facilitating access to remunerative markets.** Requires infrastructure development – roads, electricity, water supply.
- **Integrated natural resources (land and water) governance policy frameworks facilitate.** New context requires new approaches. Water harvesting integrated
- **Participatory watershed management and planning helps in improving water-related ecosystems services.**
- **New models for management of irrigation water management assets.** New models that include: WUDs, government and private sector. PPPs in Irrigation.
- **Productivity enhancement for smallholder farmers requires more than just better water management.** Technologies, inputs, knowledge, organisation, land etc.
Improved rain water management for improve water security in rural areas

- Water harvesting is:
  “The collection and management of floodwater or rainwater runoff to increase water availability for domestic and agricultural use as well as ecosystem sustenance”


Improving sustainability of watershed management

The Water “Tank”
Participatory watershed planning & management (IWRM)

The Water “Tap”
- Other ecosystem services.
- Water supply (Domestic, Livestock, Fisheries)

Rangelands and rainfed croplands
Irrigation development

Local Assessments and investments
- Household characteristics and resource endowment
- Local & National governance structures
- Services: extension, financial, pvt sector, etc
- Community infrastructure endowments – Roads, electricity, communication

Remunerative markets

$$$$
Scaling Up requires partnerships

Communities
- Self-organising
- Productive investments (on and off farm)
- Participation in policy formulations

Private Sector
- Productive investments (on and off farm)
- Service providers
- Financial services

Government
- Public investments
- Policy framework
- Social services (health, education, water supply and sanitation)

International Finance
- Institutions
  - Co-financing with government
  - Financing private sector

RESULTS, INCLUSIVE GROWTH, FOOD SECURITY, AND SUSTAINABILITY

Effective policy and regulatory environment
- Land and water governance, NRM
- Water pricing, markets
- Private sector role
- Food policies
- Financial inclusion

Participatory watershed management (NRM)
Infrastructure and social services
Financial services
Production and productivity
Market access

Thank you.