National Irrigation Dialogue: Mozambique

Promoting National and Regional Synergies to Strengthen Revitalization of Irrigation in Mozambique

31st October 2013

The International Water Management Institute (IWMI) of Southern Africa, the Ministry of Agriculture Mozambique and the National Irrigation Institute co-hosted a one day workshop in Mozambique as part of the national dialogue on agricultural water management. The event contributed to information and knowledge sharing among stakeholders to inform decision-making, investment options, policy design and implementation related particularly to irrigation. Participants also jointly identified knowledge gaps in agricultural water management and irrigation that require further research toward ensuring future research is useful to practice. The event was supported by IMAWESA, the network for Improved Management of Agricultural Water in East and Southern Africa.
National Irrigation Dialogue: Mozambique

The Improved Management of Agricultural Water in Eastern and Southern Africa network – (IMAWESA) supported a stakeholder dialogue toward “Promoting National and Regional Synergies to Strengthen Revitalization of Irrigation in Mozambique”. The International Water Management Institute (IWMI) in collaboration with Ministry of Agriculture Mozambique and the National Irrigation Institute co-hosted the one day workshop in Mozambique, on 31 October 2013. The dialogue was attended by 65 participants representing Government (MINAG, Ministry of Public Works and Housing (MOPH, National Directorate of Water), Ministry of Industry and Trade (MIC), Ministry for Environmental Affairs (MICOA), Ministry of Science and Technology (MCT) and Ministry of Planning and Development), NARS (Mozambique’s Institute of Agrarian Research), donors (USAID), academia (University Eduardo Mondlane Faculty of Agronomy and Forestry Engineering and Faculty of Economics and Michigan State University-Moz); private sector commercial irrigated farming (Tongaat Mozambique, MozFoods and rice/vegetable commercial farmers organizations from Chókwè and Baixo Limpopo Large Irrigation schemes); Government/IFAD Maputo and Gaza Corridors Development Project (PROSUL), Standard Bank (Agra funding), NGOs (TechnoServ and National Federation of Commercial Farmers); as well as CEO and directors of the two largest irrigation schemes in Mozambique (Chókwè and Baixo Limpopo).

The event sought to contribute to information and knowledge sharing among stakeholders to inform decision-making, investment options, policy design and implementation related to agricultural water management (AWM), particularly irrigation. It further promoted mutual understanding amongst stakeholders on their goals and needs, and identification of potential areas for collaboration between IWMI and key stakeholders in strengthening AWM and irrigation in Mozambique. More specifically, participants jointly identified knowledge gaps in agricultural water management and irrigation that require further research toward ensuring future research is useful to practice.

The Permanent Secretary of the Mozambique’s Ministry of Agriculture (MINAG) Mr Daniel Antonio Clemente and Dr Chilonda, IWMI- SA Head sharing some thoughts during the workshop
Opening the workshop, the Permanent Secretary of the Mozambique’s Ministry of Agriculture Mr Daniel Antonio Clemente said irrigation development is one of the key investment areas in the agriculture sector. He noted the event as of paramount importance and contributed toward the operationalization of a national irrigation policy dialogue platform. “The government has an important role in supporting irrigation through investment mobilization (public and private), policy and institutional support,” said the Mr Clemente. He also thanked IWMI for collaborating under a Memorandum of Understanding (MoU) signed by MINAG and IWMI. He referred specifically to the role played by IWMI in contributing to the preparation of the Mozambique’s irrigation strategy in 2010.

The workshop was attended by both national and regional level key stakeholders, including development partners within the irrigation sub-sector in Mozambique, who made an enormous contribution to the dialogue by raising important issues which resonated with them. The following issues were raised by participants during the dialogue:

- **Returns on investment remain a key issue.** The Mozambique government, private sector and development partners invested millions of US dollars in irrigated agriculture schemes, but the irrigated production is still very low in some of the rehabilitated schemes. Government investment is meant to increase food security and improve livelihoods of the population. Rehabilitation of irrigated sugarcane was highlighted as a successful case.
- **Food production is the top government priority in the agriculture sector, but there is a need to explore viable interventions on irrigated non-food crops.**
- **Community consultation and participation is critical when embarking on rehabilitation of irrigation schemes as it facilitates understanding of community needs and ensures development initiatives are implemented accordingly.**
- **Farmers face challenges with input and output market accessibility.** Some producers (rice) indicated that farm gate prices are a constraint because of imported rice at lower prices; they would like the government to come up with policies that can boost domestic rice production in terms of productivity and competitiveness.
- **Physical/hardware rehabilitation is not enough; rehabilitation should be complemented by software rehabilitation (revitalization) and improved irrigation monitoring & evaluation (M&E).** M&E needs strengthening for AWM generally.
- **Sustainable irrigation development goes beyond MINAG, irrigation infrastructure and agronomic issues.** Market issues need to be brought into the discussion.
- **Coordination among institutions involved in AWM interventions is still a challenge.** There is a need for collaborative/complementing interventions, including M&E.
- **The use of irrigation to enhance productivity and increase total production is critical, but rain-fed agriculture is of paramount importance in terms of the proportion of total cultivated land and production, as well as the numbers of farmers involved.** Improving the performance of rain-fed agriculture in terms of productivity, particularly by increasing harvesting and better use of rain water, is also crucial.
- **Research and extension roles in irrigated and rain-fed agriculture should be strengthened.**
- **Responsibility for maintenance of irrigation infrastructure was raised as a question regarding whether farmers should be expected to maintain infrastructure or should hire people with expertise, with cost considerations a key factor.**
- **Soil levelling is a main hindrance to production at present; levelled soils are an important technical/physical requirement for uniformity and efficiency of irrigation.**
IWMI presentations provided insight into challenge areas in Mozambique irrigation and contributed to the dialogue and discussion. The following IWMI-SA staff contributed to the Dialogue by giving well received presentations:

1. Dr Karen Villholth, “Groundwater for Smallholder Food Security and Livelihoods”
2. Dr Jonathan Lautze, “Irrigation in Southern Africa-Failure or Success?”
3. Hélder Gêmo, “Contributing to debate on Irrigation M&E in Mozambique: learning from an irrigation M&E framework development in Masvingo Province, Zimbabwe”
4. Fred Kalibwani, “Key lessons learned from the Revitalization of Small Scale schemes in Masvingo Province, Zimbabwe”

Dr Pius Chilonda, Head of IWMI Southern Africa thanked the Ministry of Agriculture, specifically the National Irrigation Institute, for jointly organizing this high-level Mozambique Irrigation Dialogue in collaboration with IMAWESA. He further said the dialogue provided an excellent opportunity for IWMI researchers to share their research and best practices as possible pathways for enhancing irrigation performance and development in Mozambique. “IWMI sees this dialogue as one of the key pathways for operationalizing the memorandum of Understanding (MoU) that IWMI has signed with MINAG on cooperation in the field of research and capacity building in land and agricultural water management”, said Dr Chilonda. He also suggested that IWMI welcomes the collaboration with MINAG and with its researchers who have extensive expertise in diverse areas of research toward research that will have a positive impact on people and contribute to the aspiration of the Government of Mozambique towards improving irrigation performance.

“To ensure effective irrigation, strategic planning for the use of resources and appropriate policies to guide irrigation is needed”, said Paiva Munguambe, Director General of the Department of Agriculture in Mozambique. “The workshop output will be a key input for the preparation of the first national irrigation annual meeting organized by the National Irrigation Institute (INIR) to be held in November 2013,” emphasized Director Munguambe. He also thanked participants for their invaluable contribution during the dialogue and said their feedback will contribute towards a better understanding of the challenges facing irrigation development in the country.

Presentations, speeches and media coverage are provided in the Annex.
Photos from the event

IWMI-SA Panel: from L to R: Hélder Gêmo, Dr Jonathan Lautze, Dr Rafael Uaiene (Session facilitator- Michigan State University/Moz) Dr Karen Villholth and Fred Kalibwani responding to questions during the Dialogue.

Government of Mozambique and stakeholder participants

Participants at the Dialogue
Ministério da Agricultura
Instituto Nacional de Irrigação

Programa do Seminário

PROMOVENDO SINERGIAS A NÍVEL NACIONAL E REGIONAL COM VISTA AO REFORÇO DA REVITALIZAÇÃO DA IRRIGAÇÃO EM MOÇAMBIQUE - SOLUÇÕES DA INVESTIGAÇÃO PARA MAIOR EFECTIVIDADE DOS INVESTIMENTOS NA “INTERFACE”: ÁGUA-PRODUÇÃO DE ALIMENTOS-REDUÇÃO DA POBREZA

GRAND VIP HOTEL, Maputo 31 de Outubro 2013

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<th>Horas</th>
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<td>08:15-08:30</td>
<td>Registo dos Participantes</td>
<td>MINAG/INIR</td>
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<td>08:30-10:30</td>
<td><strong>SESSÃO 1</strong>&lt;br&gt;• Abertura&lt;br&gt;• Abertura e apresentações sobre irrigação com enfoque no subsector a escala nacional e regadios seleccionados</td>
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<td>08:30-08:40</td>
<td>Boas vindas e Abertura Oficial&lt;br&gt;• Exmo. Secretário Permanente (MINAG) Daniel Clemente</td>
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<td>08:40-08:50</td>
<td>Intervenção pelo Instituto Internacional de Maneio de Água - África Austral (IWMI-SA)&lt;br&gt;• Director do IWMI-SA Pius Chilonda</td>
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<td>08:50-09:00</td>
<td>Objectivos e Resultados do Seminário&lt;br&gt;• Coordenadora do Maneio Melhorado de Água para Agricultura na África Ocidental e Austral (IMAWESA) Nicole Lefore</td>
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<td>09:00-09:20</td>
<td>Desenvolvimentos recentes no subsector de irrigação em Moçambique rumo à sua revitalização&lt;br&gt;• Director-Geral do INIR Paiva Munguambe</td>
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<td>09:20-09:40</td>
<td>Revitalizando grandes sistemas de rega: O caso do Regadio do Baixo Limpopo&lt;br&gt;• PCA do Regadio do Baixo Limpopo Almando Ussivane</td>
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<td>Revitalização do Regadio do Chókwè: Realizações, desafios e investimentos com enfoque na campanha agrícola 2013-2014</td>
<td>• PCA do Regadio do Chókwè Soares Xirinda</td>
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<td>10:00-10:15</td>
<td>Projecto de Desenvolvimento de Cadeias de Valor nos Corredores do Maputo e Limpopo (PROSUL): principais áreas de intervenção, desafios e oportunidades de colaboração</td>
<td>• Gestor do Projecto Daniel Mate</td>
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<td>10:15-10:45</td>
<td>Debate e feedback em plenário</td>
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<td>10:45-11:00</td>
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<td>11:00-11:20</td>
<td>Irrigação na África Austral: Sucesso ou Insucesso? Um critério para determinar sucesso ou insucesso</td>
<td>• Investigador do IWMI-SA Jonathan Lautze</td>
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<td>11:20-11:40</td>
<td>Sistemas de Monitoria e Avaliação para Sustentabilidade: um quadro de M &amp; E e indicadores de desempenho</td>
<td>• Investigador do IWMI-SA Hélder Gêmo</td>
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<td>11:40-12:00</td>
<td>Água subterrânea e produção de alimentos na África Sub-Sahariana estágio actual e perspectivas para produção de alimentos e alívio a pobreza no seio de pequenos produtores</td>
<td>• Investigadora do IWMI-SA Karen Villholth</td>
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<td>12:00-12:20</td>
<td>Informando o futuro: Abordagem metodológica holística para revitalização e desenvolvimento de sistemas de rega: Lições chave resultantes da revitalização de sistemas de rega na Província de Masvingo, República do Zimbabwe</td>
<td>• Oficial de Programas do IWMI-SA Fred Kalibwani</td>
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<td>12:20-13:00</td>
<td>Discussão e feedback em Plenária</td>
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<td>Considerações finais/resumos pelos facilitadores do encontro</td>
<td>• Exmo. SP (Ministério do Plano e Desenvolvimento) Salim Valâ e o Coordenador do MSU Rafael Uaiene</td>
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<td>13:10-13:20</td>
<td>Considerações finais pelo IWMI-SA</td>
<td>• Director do IWMI-SA Pius Chilonda</td>
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<td>Considerações Finais e Encerramento pelo MINAG</td>
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REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA AGRICULTURA

DISCURSO DE ABERTURA DO EXMO. SENHOR
SECRETÁRIO PERMANENTE DO MINAG AO
SEMINÁRIO

“PROMOVENDO SINERGIAS A NÍVEL NACIONAL E
REGIONAL COM VISTA AO REFORÇO DA REVITALIZAÇÃO
DA IRRIGAÇÃO EM MOÇAMBIQUE - SOLUÇÕES DA
INVESTIGAÇÃO PARA MAIOR EFECTIVIDADE DOS
INVESTIMENTOS NA “INTERFACE”: ÁGUA-PRODUÇÃO DE
ALIMENTOS-REDUÇÃO DA POBREZA”
Annex 3: Presentations

Click on image to open document

**Groundwater for Smallholder Food Security and Livelihoods - A synthesis of status and prospects in Sub-Saharan Africa**

Karen G. Villholth
Senior Researcher
IWMI, International Water Management Institute, Pretoria, South Africa

Stakeholder Workshop: Mozambique National Irrigation Dialogue
MINAG/ National Irrigation Institute (INIR), Maputo, Mozambique, 31 Oct. 2013

**INFORMING THE FUTURE**

OVERALL METHODOLOGICAL APPROACH FOR SMALL-SCALE IRRIGATION SCHEME REVITALIZATION & DEVELOPMENT:
Key Lessons from Revitalizing Small-Scale Irrigation Schemes in Masvingo Province, Zimbabwe

Mozambique National Irrigation Dialogue
31 October, 2013

Water for a food-secure world
www.iwmi.org
Irrigation in Southern Africa: Success or Failure?

Justin Mutiro and Jonathan Lautze
IWMI - SA
31/10/13

Monitoring and Evaluating Irrigation Performance in Southern Africa

Contributing to debate on Irrigation M&E in Mozambique: learning from an irrigation M&E framework development in Zimbabwe

Mozambique’s Irrigation Workshop
MINAG/INIR, IWMI and IMAWESA
Maputo, VIP GRAND HOTEL, October 31
INFORME DAS ACTIVIDADES DA HICEP
POR OCASIÃO DO
WORKSHOP SOBRE IRRIGAÇÃO

Chokwe, 31 de Outubro de 2013

INSTITUTO NACIONAL DE IRRIGAÇÃO
Desafios para Revitalização
do Subsector de Irrigação

Apresentação à Reunião Técnica
Maputo Grand Vip Hotel
30 de Outubro 2013
REPUBLICA DE MOÇAMBIQUE

MINISTÉRIO DA AGRICULTURA

PROJECTO DE DESENVOLVIMENTO DE CADEIAS DE VALOR NOS CORREDORES DE MAPUTO E LIMPOPO (PROSUL)

Outubro, 2013
Annex 4: Media coverage

NOTÍCIAS, 31.10.2013, Economy section, page 7

Irrigação objecto de debate

O MINAG, através do recentemente formado Instituto Nacional de Irrigação (INIR), organiza hoje, em Maputo, um debate técnico e de políticas sobre o desenvolvimento da irrigação. O encontro é realizado em colaboração com o "Instituto Inter-nacional de Manejo de Água para Agricultura", escrito para África Austral (IWMI-SA) e com a "Initiativa de Manejo Melhorado de Água para Agricultura na África Ocidental e África Austral (IMADESA)", ambos baseados na África do Sul (Pretoria) e que têm promovido estudos, monitória e avaliação da expansão de terra irrigada e diálogo informado sobre assuntos de políticas de irrigação com parceiros na Região Austral.

O encontro irá discutir os últimos desenvolvimentos de política, institucionais, de investimento e desafios no subsector de irrigação em Moçambique, incluindo a discussão de estudos pertinentes sobre irrigação conduzidos na região da SMAC pelo IWMI-SA, isto na vertente da sua relevância, adaptabilidade e aplicabilidade em Moçambique. O encontro irá também debater potenciais parcerias na área de investigação para o desenvolvimento da irrigação nas várias vertentes nomeadamente técnica, económica, social e ambiental.

Participarão ao evento várias instituições do Estado (MINAG, MOPH, MCT, MIG, MGOA, INDG) representantes do sector privado, organizações de produtores, ONG’s, instituições académicas, parceiros de desenvolvimento e investigadores do IWMI-SA baseados na região austral.

A irrigação é vista pelo Governo como uma das áreas-chave de investimento ao sector agrário no âmbito da implementação do Plano Estratégico de Desenvolvimento do Sector Agrário (PESGA), em particular para o aumento da produtividade e produção de culturas alimentares. Em Dezembro de 2010, o Governo aprovou a Estratégia de Irrigação, criou o INIR em Março de 2012 e está em cursos grandes projectos de investimento no subsector de irrigação, como o Projecto de Desenvolvimento Sustentável da Irrigação (PROIRR), o Projecto de Desenvolvimento de Cadenas de Valor nos Corredores do Limpopo e do Maputo (PROSEL) para além da revitalização dos regadios do Chokwe e do EduBio Limpopo, entre outros investimentos.

Reconhece-se que a Estratégia de Irrigação estabelece a expansão de pelo menos 50.000 ha de terra irrigada até 2020, bem como o aumento dos índices de aproveitamento e de produtividade da terra irrigada em Moçambique.