

Legal challenges to improve groundwater management: *The case of Ethiopia*

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Seifu Kebede

Groundwater in Ethiopia

Features, Numbers and Opportunities

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
MINISTRY OF WATER RESOURCES

WATER SECTOR DEVELOPMENT PROGRAM
MAIN REPORT VOLUME I

Regional-scale interactions between groundwater and surface water under changing aridity: evidence from the River Awash Basin, Ethiopia

Seifu Kebede, Katrina Charles, Samuel Godfrey, Alan MacDonald & Richard G. Taylor



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Flesh and bones: Working with the grain to improve management of water

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ABSTRACT

Despite cogent critiques and limited success, policies for natural resource management to strengthen CBM by 'working with the advocates, such approaches ensure that they are therefore more likely to be effective. Implications, and operationally challenging. In community-managed water in rural Ethiopia arrangements by undertaking an in-depth also undertake yearlong studies in 12 countries. This focus on the local is complemented by sustainability assessments. Our multi-co

Ethiopia: Strategic Framework for Managed Groundwater Development (DRAFT)



IWMI Working Paper 184

Gender Dimensions of Community-based Groundwater Governance in Ethiopia: Using Citizen Science as an Entry Point

Likimyelesh Nigusie, Jennie Barron, Alemseged Tamiru Haile, Nicole Lefore and John Gowing

Point of departure, Ethiopia's policy landscape

- As for SSA at large, water resources development has historically centred around surface water
→ GW less well understood ⇒ inadequately regulated
- The large potential role & contribution of GW has been recognized in the past 10+ yrs
- Current National Policy & Strategy provisions on GW build on a **development paradigm**, not sustainability

Best practices for GW policy

- GW governance is a complex *process* that requires *coordination* across multiple spatial and time scales, sectors and administrative levels
 - + with actors from international to local level
- Avoid silos, ensure integration & holistic approaches
- Implementation of permit system is costly
 - consider widened but different *de minimis* exemptions

Best practices for GW policy, cont'd

1. GW is used by all sectors, but must be prioritized for drinking water purposes.
2. Clear mandates and power division needed.
3. Because GW is 'invisible', it is difficult (costly, time-consuming) to know how much there is, where, and what quality it has. NB differences betw. shallow & deep aquifers
→ Use the precautionary principle!



Best practices: What to regulate

- The ‘greening’ of groundwater law
- Dealing with both *diffuse & point sources* of pollution – BAT
- Selective targeting of aquifers *under stress*
- Countering effects of groundwater *depletion* – recharge, RWH
- Master /Basin plans for overall allocation *caps*
- Drinking water *source protection*
- The role of groundwater *users* in governance
- Ensure that *drillers* are appropriately qualified + well spacing

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FEDERAL NEGARIT GAZETA

OF THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

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6th Year No. 25
ADDIS ABABA - 9th March, 2000

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<p style="text-align: center;">አዋጅ ቁጥር ፳፻፲፱/፲፱፻፺፪ የኢትዮጵያ የውሃ ሀብት አስተዳደር አዋጅ</p> <p>የኢትዮጵያ የውሃ ሀብት በአግባቡ ተጠብቆና በተገቢው አስተዳደር ሥር ሆኖ ለሕዝቦቿ ለላቀ ማኅበራዊ እና ኢኮኖሚያዊ ጥቅም እንዲውል ለማድረግ የውሃ ሀብት ጥበቃ፣ አጠቃቀምና አስተዳደር አዋጅ ማውጣት በማስፈለጉ፣</p> <p>በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ ሕገ መንግሥት አንቀጽ ፶፭ (ሸ) መሠረት የሚከተለው ታውጋል፡-</p> <p style="text-align: center;">ክፍል አንድ ጠቅላላ ድንጋጌዎች</p> <p>፩- አዋጅ ርዕስ ይህ አዋጅ “የኢትዮጵያ የውሃ ሀብት አስተዳደር አዋጅ ቁጥር ፳፻፲፱/፲፱፻፺፪” ተብሎ ሊጠቀስ ይችላል።</p> <p>፪- ትርጓሜ የቃሎት አገላለጽ ሌላ ትርጉም የሚያሰጠው ካልሆነ በስተቀር በዚህ አዋጅ ውስጥ፡</p> <p>፫- “የውሃ መመናመን” ማለት በሰው ስራ ሽጭም በተፈጥሮ ለውሃ ምክንያት የውሃ ሃብት መጠን በአንድ የተወሰነ ወቅት መገኘት ከሚገባው መደበኛ ደረጃ እየቀነሰ መምጣት ነው።</p> <p>፬- “የቤት ውስጥ ግልጋሎት” ማለት ለመጠጥ፣ ምግብ ለማግለጫ፣ ለጽዳት ወይም ሌላ የቤት ውስጥ ሥራ ማዋል ነው።</p> <p>፭- “ከአቅም በላይ የሆነ ጋዜጠኛ” ማለት በኢትዮጵያ የፍትሕ ብሔር ሕግ እንደተደነገገው ነው።</p>	<p style="text-align: center;">PROCLAMATION NO. 197/2000 ETHIOPIAN WATER RESOURCES MANAGEMENT PROCLAMATION</p> <p>WHEREAS, it has become necessary to issue a water resources management, protection and utilization Proclamation to put the water resources of Ethiopia to the highest social and economic benefit for its people through appropriate protection and due management;</p> <p>NOW, THEREFORE, in accordance with Article 55 (1) of the Constitution of the Federal Democratic Republic of Ethiopia, it is hereby proclaimed as follows:</p> <p style="text-align: center;">PART ONE General Provisions</p> <p>1. Short Title This Proclamation may be cited as the “Ethiopian Water Resources Management Proclamation No. 197/2000.”</p> <p>2. Definitions Unless the context requires otherwise, in this Proclamation:</p> <p>1) “Depletion of water” means a decrease in the quantity of water below its normal level at a given season, whether due to man-made or natural causes;</p> <p>2) “Domestic use” means the use of water for drinking, cooking, sanitation, or other domestic purposes;</p> <p>3) “Forc majeure” means as defined in the Civil Code of Ethiopia.</p>

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Best practices: Who does what

Federal level:
coordination,
ensure
integration w.
pollution
prevention,
reporting

(NATIONAL LEVEL)

STRATEGIC PLANNING

- provision for aquifer resource/vulnerability assessment
- design and implementation of national/ regional/ basin groundwater policies
- definition of protection (conservation or control) area policy
- mandate for drought or emergency actions
- status of groundwater plans and use priorities

(LOWEST APPROPRIATE LEVEL*)

LAND-USE MANAGEMENT

- procedures for groundwater protection zones
- provisions for aquifer recharge area conservation

REGULATION OF WATER USERS

- administration of abstraction/use rights
- administration of wastewater discharge permits
- promotion of user/stakeholders/associations
- appeal and sanction procedures

* depending on size of country or other factors

From Nanni, Foster et al. 2004 Groundwater legislation & regulatory provision from customary rules to integrated catchment planning. World Bank GW-MATE.

Water policy – revised (draft)

Ensure that the exploitation of GW shall be based on abstraction of the maximum amount equal to the sustainable yield,

maintaining long-term, dynamically stable storage of high-quality GW as determined by competent authorities after consultation with local communities, as appropriate, and establish regulatory norms.

Revisions to law: recommendations

- Demand AND supply management
- Endorse the **precautionary principle**, **source protection/** polluters pay principle
- Stipulate mandatory **recharge** measures with every abstraction permit

Water from culvert is channeled into check-dams which enhances groundwater recharge, Tigray, Northern Ethiopia



<https://upgro.org/2015/03/22/roads-for-water-new-research-puts-ethiopian-farmers-in-the-driving-seat/>

Revisions to law: recommendations 2

- **Leave No One Behind:** HH /domestic use = prio. 1
Consider SDG 6 (+ interlinked targets)
 - JMP reporting + UNICEF
 - & universal access / the human right to safe drinking water
- Agricultural use /Food production = prio. 2
Consider SDG 2 Zero hunger
Shallow wells – ATA, JICA, REACH & other research programs
- **Industrial use** incl. cash crops = prio. 3
SDG 12 Sustainable production
Users + polluters pay = incentive for resource **efficiency**

Thank you!

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