

2011

Annual progress report 'Groundwater in the political domain'

Revised June 2012



GP Consortium - MetaMeta (representative), Delft Technical University (The Netherlands), Palestinian Water Authority (Palestinian Territory), Water and Environment Centre (Sana'a, Yemen), Mekelle University (Mekelle, Ethiopia).

Project details

Project title : Groundwater in the political domain
Project nr: :
Name of coordinator : Frank van Steenberg
Consortium partners : MetaMeta (The Netherlands), Delft Technical University (The Netherlands), Palestinian Water Authority (Palestinian Territory), Water and Environment Centre (Sana'a, Yemen), Mekelle University (Mekelle, Ethiopia), Oromia Water Works Design Supervision Enterprise (Ethiopia).
Project Countries : Ethiopia, Yemen
Starting date : 1 November 2010
Reporting period : 2011
Date of submission : December 2011 (adp. version March 2012/June 2012)

Alteration in the composition of the project team

Name / Contact details	F/M	Role in project	Start date	End date	# of months/fte
Dr. Omar Bamaga ¹	M	Senior researcher 1 to all	10/2010	12/2013	1,0
Fuad Bateh left PWA . His work is taken over by Dr. Shadad Attili, Dr. Karen Assaf, Omar Zayed and Deeb Abdelghafour. Involvement of other staff (ms. Salaam) is considered,	F/M	Senior researchers 1 to all	10/2010	12/2013	0,25

¹ Replacing Dr Naif Abu Lohom, at the Water and Environment Centre, Sana'a University, Yemen. Also expected that Dr Adel Es Wehali will take larger role in research team.

Summary of works

The consortium carrying out the CoCooN funded project 'Groundwater in the Political Domain' has since the start of the project (1st of November 2010) carried out a variety of fieldwork, reporting, (scientific) writing and video documenting activities, all as part of the three main activities that were identified in the proposal, namely:

1. analyse how conflicts and cooperation and 'do nothing' situations are handled in the political and institutional domain. Case studies will be developed from each area that are meant to trigger discussion – mainly year 1 and part of year 2
2. develop action plans to get larger political involvement in discussing how groundwater is governed and how to increase the fair and optimal use of this resource – starting year 2
3. build capacity and communication material so that more professionals and practitioners can play a role in activating the political and institutional domain – starting year 3.

These activities have also been set out in a logframe which relates project objectives with activities and outputs and has been worked out during the proposal phase of the project. The reviewed and final version of the logframe is attached as annex 1).

Within the CoCooN group the way day to day activities are structured are that each country team has an interface person in the Dutch Team (Palestine – Ebel Smidt; Yemen- Simon Chevalking; Ethiopia – Frank van Steenbergen). The interface persons have travelled regularly to Palestine Territories (3 times), Ethiopia (3 times), Yemen (1 time) – sometimes using funds from other assignments.

Following this, in 2011 a variety of activities have been initiated and whereby the outputs for the CoCooN project have been guiding, but interplay with other running programs has also been sought. As such overall (or umbrella) activities of the project include: writing of a chapter for the theoretical framework; the writing of a book chapter for the upcoming IUCN Spring publication on groundwater and social mobilisation; contributions to the policy letter on water and development cooperation for the Netherlands Parliament; contributions to the formulation of the plans for Dutch niche diplomacy on water; advise to specific country and regional policy officers of the Ministry of Foreign Affairs; and the presenting on Local Water Governance The National Conference on Management and Development of Water Resources in Yemen Sana'a 15-17 January 2011 at the International Water Conference and 'Managing the water buffer: for climate change adaptation and food security' at the - Bonn 2011 Conference- The Water Energy and Food Security Nexus - Solutions for the Green Economy. Expert conference:' (16 – 18 November 2011).

Underneath first an overview is given of the *project activities* which have been carried out per country, followed by an overview of the (shared) *preliminary scientific findings*.

Ethiopia

In Ethiopia an MSc research (Maud Radema) has been completed in the Raya Kobo Basins that focused on the role of the local and regional /federal government in the development of groundwater. Video material has been shot to support this thesis which will be used to make a documentary. A variety of desktop / field researches have been initiated to support the case study in Ethiopia, including the detailed technical (hydro geological) description of the study area, role of politics in groundwater and the development of irrigated agriculture (see also overviews of paper titles underneath). Furthermore Ethiopia history on droughts, food insecurity and human tragedy will be looked at to see the relation between resources scarcity and politics. The preparation of video material on the victims of food insecure areas in Ethiopia is currently underway. Support has also been given to the Embassy in defining its water programme, including advice on small-scale irrigation. More field work is required particularly in assessing the different groundwater systems and the role of the government in providing resource assets and food aid.

Palestinian Territories

Baseline studies on water and land use in the selected area have been finalised in draft. A start has been made with translating the preliminary results in action plans. A groundwater model is being built currently. Cohesion and integration has been reached with other programmes in Palestine. Special attention is given to the integration of the proposed water programme of the Dutch Embassy with the existing agricultural programme. Advices have been provided to the Netherlands' Embassy and PWA on specific requests. Outreach has started amongst others by supporting a study tour of TUD MSc students and their professors.

Support has been given to video production on the difficulties of proper water management in the Palestinian Territories according to the ideas as explained under the activities in Yemen..

As mentioned, support has also been given to the preparation of the Multi Annual Strategy Plan of the EKN in Palestine, which is proposed to focus on IWRM, water governance and transboundary water management. Inputs for the WWF6 in Marseille are under preparation.

Yemen

Besides the papers (2) that have been written and are accepted for publication and are referred to in the overviews underneath, activities of and relating to the CoCooN project include: an additional case study area, shooting of videos, and support to the Netherlands embassy programme in Sana'a. A parallel paper on what happens if groundwater really is exhausted in a comparable environment (Pakistan, Kuchlugh) – in terms of conflict and cooperation (or lack of it) has been drafted too

Videos have been produced on (local) water management in Yemen, they show examples of water scarce areas in which through agreements and cooperation community level management has been enabled and the link with the national Water Law. These videos on communal groundwater management relate to our 'Groundwater in the political domain' project as well as serve to enhance knowledge of these systems, create awareness and link with other organisations, including the Association of Water Users Associations, NGOs (Progressio). The DVD will be duplicated and shared among stakeholders in Yemen.

As mentioned, support has also been given to the preparation of the Multi Annual Strategy Plan (MASP) of the EKN in Yemen, this included reviewing donor policy and suggestions as to priority areas. What has been discussed is the development of a basin project focussing spate surface water distribution on the Tihama (following experience of Al Mujelis case) .

Because of the political situation in Yemen no support has been given to political action plans at country level – however the impact of the crisis on water management will be documented in an additional study.

Preliminary scientific findings

All countries	Understanding the political system is invaluable for understanding (and influencing) mechanisms in water management, (reach of government and regulation, extent of self-management capacity. financial architecture). The political system can be characterized with a number of key parameters (it is not a blackbox). Most likely due to the nature of groundwater – being a very local resource that gives rise to considerable local autonomy (unlike many surface water resources) – that governments find difficult to engage with.
Palestine, Yemen	High value crops change the dynamics on groundwater management – they may compensate for losses and rationalize water use – but not always in the envisaged direction (no effect on de facto loss of diesel subsidy in Yemen 2011)
Ethiopia	High political will can lead to an overemphasis on planning and less to support local entrepreneurial processes or realistic problem solving planning There is a large attention for 'household irrigation' as part of the targets to increase irrigation coverage – this requires an operational modality that is at variance with the prevailing system of the 'developmental state'
Yemen	There is sometimes an almost artificial emphasis on national level processes and regulation of water management – for instance in supporting the NWRA. This gives the false impression that things happen at this level and that politics or institutions at this level make an impact. This illusion serves several interests, but ignores local resilience and adaptive capacity. There is a fine interplay between formal regulation and the processes of local management of groundwater . The last benefits from the existence of national laws as they change and improve the boundary conditions for local management – even though the national laws as such are not implemented. There is in general a large not always recognized interest in local groundwater regulation and also groundwater recharge – defeating the 'basket case' image of Yemen
Supplementary study, Pakistan	The destruction of the groundwater resource base does not necessarily lead to catastrophe for those directly involved and effected – there may have alternative sources of livelihood Even with destruction of groundwater resources imminent there may not be a response to disaster is not a given – there are parallels with the tragedy of commons
Yemen, Ethiopia	For political leaders ground water management (as against groundwater

development) may be an unrewarding topic compared to anti-terrorism etc

Reflection

In summary the first year was characterized much by fact finding and data collection. Some of this went slower than expected and would need to be carried through to the second year. A general observation – shared between the country teams – has been that the political angle on water management gives new insights and is more insightful than focus on governance processes only. Having said so much emphasis is required in consolidating shared insights (this is now only done through the circulation of the contribution to the CoCoon book) and in consolidating research outputs. Some of the early research findings are given in the table above. Though the political angle to groundwater management helps to understand things from a different and refreshing perspective one observation is that to cast this in scientific writing is challenging, as research team members feel uncomfortable to communicate these messages and also it is more difficult to come with an evidence basis – though the analysis and insight are there.

The first year offered some unexpected (not planned in the project document) windfall opportunities to advise in the formulation of the new Dutch international development cooperation policy focus on water – both globally and in the three countries where CoCoon is active. In the second year (according to plan) the work on political action plans will start within the different countries and ideas for capacity building will be formulated. In the first year in Yemen however the ideas on local cooperation were included in the Sana'a Declaration on the Yemen Water Partnership – emerging from the main conference in January 2011. This process in Yemen was then stalled during the period of political transition.

Format A. Reporting project management process (refer as much as possible to the original proposal/Memorandum of Agreement)

Issues	Progress and / or constraints	Adjustments made (in planning or otherwise)
Project management		
<ul style="list-style-type: none"> Leadership and coordination 	As according to tasks, MetaMeta has diligently coordinated activities of all consortium partners, and has gathered the results of the frequent visits to Ethiopia and the Palestinian Territories (including for other projects) of MetaMeta and TUD. The Dutch organizations have enabled direct engagement as well as long stay in Yemen in February / March 2011 and in Palestine starting October 2011 – January 2012.	
<ul style="list-style-type: none"> Internal communication and transparency 	Frequent contact has been maintained with all project partners, through email and phone	
<ul style="list-style-type: none"> Division of tasks and required skills / capacities 	Within the CoCoon group the way day to day activities are structured are that each country team has an interface person in the Dutch Team (Palestine – Ebel Smidt; Yemen- Simon Chevalking; Ethiopia – Frank van Steenberg). The interface persons have travelled regularly to Palestine Territories (3 times), Ethiopia (3 times), Yemen (1 time) – sometimes using funds from other assignments.	
<ul style="list-style-type: none"> Efficiency of project operations 	-- due to the political unrest in Yemen, field visits and mobility of the research team were severely constrained, this affected the project operations and efficiency	
<ul style="list-style-type: none"> Level of motivation among partners and mutual trust 	- although activities were constrained in Yemen overall motivation of partners has been mutually good	
Risks and risk management		
<ul style="list-style-type: none"> Internal and external risks & ways to deal with it 	Contextual risks (as referred to in the MoA) have been identified and limited the working space of the partner in Yemen, due attention has been paid by the local partner for the safety of staff (allowing leaves from hard hit capital, Sana'a), as well close contact has been kept with EKN in Sana'a	No adjustments have been made as to dealing with external/ contextual risks although activities have been postponed and will be picked up as safety of is ensured and activities can effectively be carried out again
<ul style="list-style-type: none"> Newly identified risks 	No new risks identified (events in Yemen have been described above)	
Monitoring and learning		
<ul style="list-style-type: none"> Monitoring activities: indicators, setting targets 	Although no strict adherence has been accomplished as to bi-monthly reporting (as suggested in the proposal), continuous contact with all the partners has allowed to keep track of project progress.	
Knowledge sharing		

<ul style="list-style-type: none"> • <i>Learning activities within the project</i> 	<ul style="list-style-type: none"> - <i>initiating field visits have allowed for learning among consortium partners</i> - <i>videos that have been made (collaboratively with other programmes) have been disseminated through hard copy and posting on TheWaterChannel.</i> 	
<ul style="list-style-type: none"> • <i>Exchange events with other projects or organisations</i> 	<ul style="list-style-type: none"> - <i>project place was initiated by the WOTRO CoCooN project office as exchange platform between the different CoCooN projects and has been updated with (draft) results from the consortium</i> - <i>There has also been a lot of additional interaction between the team – i.e. Dr. Kifle (Ethiopia) attending IWRM seminar in Yemen (on invitation of WEC – in 2010) and Taye Alemehayu and Frank van Steenbergen doing a joint presentation at the Bonn Nexus Conference (November 2011).</i> 	
Financial management		
<ul style="list-style-type: none"> • <i>Adequacy of budgets</i> 	<ul style="list-style-type: none"> <i>Budgets have been found adequate (the amount budgeted for field work costs, such as travel, meetings, hotel however may constrain field teams)</i> 	
<ul style="list-style-type: none"> • <i>Efficiency and transparency of financial management</i> 	<ul style="list-style-type: none"> <i>all finances are recorded and documented towards NWO/WOTRO</i> 	

Format B. Reporting project outputs and activities

Specific objective²:			
Expected results:	Realisation of planned activities	Progress towards outputs (refer to set targets)	Discrepancies and proposed adjustments
<i>1.1: Action plans preparation: Investigate measures that can be taken in the interface between the political, institutional and economic/ hydrological domain</i>	conceptual framework has been drafted		
<i>1.2: Implement action plans to effectively engage political domain</i>	action plans yet to be developed – this is the main thrust after the first year. The political action plans are planned for 2012 and beyond.		
<i>1.3: Replication / upscaling of experiences with different approaches and tools for engaging the political domain in other situations (adjusted)</i>	See above. Parallel activities have been identified in Pakistan (incl preparation of paper)		
Specific objective 2:			
Expected results	Realisation of planned activities	Progress towards outputs (refer to set targets)	Discrepancies and proposed adjustments
<i>2.1: Understand response or non-response from political domain to pressures and potential in groundwater development</i>	sector engagement to start in 2012		
<i>2.2: Understand institutional domain: effectiveness default/ laisser passer, conflict and cooperation as political strategies</i>	various (field) research documents in production, further deductive steps in 2012		
<i>2.3: Assess effectiveness of conflict and cooperation on the basis of hydrological performance</i>	first technical / hydrological papers upcoming (see also paper references)		
Specific objective 3:			

² Please note that no precise progress indication is expected at the specific objective/outcome level after a one year period. However, in the narrative you are requested to indicate whether the project is 'on track' to realize the defined objectives and outcomes.

<i>Expected results</i>	<i>Realisation of planned activities</i>	<i>Progress towards outputs (refer to set targets)</i>	<i>Discrepancies and proposed adjustments</i>
<i>3.1: Improved acumen of the entire research team</i>	not yet measured – but the engagement has enabled the team to take new perspectives (less institutional, more political)		
<i>3.2: Short course module on conflict and cooperation and activating the political domain in groundwater management</i>	yet to be constructed		
<i>3.3: Course provides to practitioners and postgraduates</i>	not yet carried out		

Format C. Reporting project communication (please refer to original communication strategy)

Category	Communication objectives (initial or adjusted)	Progress and / or constraints to realise set communication objectives	Lessons learned
Stakeholder involvement (e.g. local communities, NGOs, research, government and private sector)	<p>The emphasis in the first year was on the analysis. This has been largely done but output is partly in rough document versions. We hope to finalize more papers on it – results are very interesting.</p> <p>The second year the emphasis was supposed to be more on the political action in the countries. The fortunate windfall opportunity arose with the new Dutch water programme to be engaged in advisory capacity in all three countries. In fact the engagement with CoCoon helped a lot there. In all three countries we used the ideas and feedback from the resp. Palestinian, Yemeni and Ethiopian team members – but they were not directly part of the advise team with exception of Taye Alemehayu (Ethiopia) and Omar Bamaga (Yemen) – who both made contributions.</p>		
(1): Politicians, decision makers, gatekeepers	Effective agenda setting in support of better groundwater management and fairer access	<p>- in Yemen a national conference (including attendance of Yemeni President) has been attended as well as a presentation on groundwater governance has been delivered – main point from the paper were incorporated in Sana’a Declaration that was endorsed by Cabinet</p> <p>- in Palestine a public meeting and discussion between the Israeli minister for Environment and the Palestinian minister of Water has been supported and guests from the NRO are introduced</p>	

		<p>- Team members contributed in advisory capacity to (1) Multi Annual Strategy Plans (Dutch Aid) for Ethiopia, Palestine Territories and Yemen (2) Policy letter on the water program to the Dutch Parliament</p>	
(2): National and Local Media	Raise the attention for need and scope for managed groundwater development and put pressure on the political system (overcoming inertia)	<p>- first documents and videos (also joint with other running project) have been published and disseminated among stakeholders (see format d - f) Yemen videos made in Arabic have drawn very fast viewership at www.thewaterchannel.tv</p> <p>In the coming year the communication strategy will be further developed – in Yemen for instance the videos will be burned on CD for circulation among water users groups – so as to reach a general but concerned public. In the other countries tailor made communication strategies in support of the political action plans will be developed.</p>	
(3): National Professionals –Working at different Ministries,	Make a larger group of groundwater management experts more astute in operating not only in technical and institutional domain but also in the political domain and create a larger drive to change things for better groundwater management and fairer access	<p>first documents and videos (also joint with other running project) have been published and disseminated among stakeholders (see format d - f)</p> <p>In the coming year specific communication activities will be programmed in this regard.</p>	
International collaboration (e.g networks, platforms, institutions)			
(1): Network of Specialists in Groundwater Management and Governance - GWMATE (Groundwater	Make a larger group of groundwater management experts more astute in operating not only in technical and institutional domain but also in the political domain and remove	no activities as of yet	

Management Assistance Team – policy and project support facility of World Bank - IAH (International Association of Hydrogeologists – membership of 4000)	'myths' and passive attitude about political will (and absence thereof)		
(2): Water and Peace and Conflict Programmes: - UNESCO-PCCP (From Potential Conflict to Cooperation Program) - International Water Diplomacy Course (with Clingendael and the Arab Water Academy)	To add systematic and experience-based approaches in political strategy development and mediation to the repertoire of water-related diplomacy and negotiation	<i>Cooperation started on common outreach , like e.g. at WWF6</i>	
(3): Water Education Networks: - CAPNET	Make the training material widely available beyond the three countries in CoCooN project as the topics is new	<i>no activities as of yet</i>	
Output dissemination	At this stage videos have been the main communication outputs in this part of the project. They have been prepared ahead of time to serve the next step of political action. The Yemen videos were made jointly under CoCooN and the RNE support (corrected). Again this activity has been done ahead of schedule – the idea is to discuss as part of the larger political action plan what (type of) additional material will be prepared.		
(1): General public with interest in groundwater governance, groundwater management and challenges in this field in Palestine Territory/	Introduce the manageability of groundwater resources and the large importance thereof (given large use (share of) of groundwater in the various	<i>first videos (also joint with other running project) have been published and disseminated among stakeholders and broader audience (through TWC and offline media) Contribution to popular publication by IUCN (SPRING) – that is scheduled for publication and broad dissemination in 2012 (overdue)</i>	

(2): Water resource specialists in general	Familiarize them with the importance and do-ability of effective groundwater management and the importance of moving beyond the pure technical	<i>first videos (also joint with other running project) have been published and disseminated among stakeholders and broader audience (through TWC and offline media)</i>	
(3): General future audience	Repository function – making sure that the material produced does not disappear and will still be available in the future for those taking an interest in it in near and medium-term future	<i>- TheWaterChannel includes, as video repository, a number of videos that have been made relating to the CoCooN project</i>	

Format D: Reporting on publications**1) Articles in peer-reviewed academic journals and other academic journals****Relating to the work in Ethiopia:**

Status (in preparation, submitted, in press)	in preparation
Title of article	Politics of Water in Ethiopia (tentative)
Full title of journal	(to be ascertained)
Refereed journal yes/no	Yes
Year	2013
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Taye Alemayehu, Frank van Steenbergen
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Status (in preparation, submitted, in press)	in preparation
Title of article	Capacity in the Ethiopian Water Sector – politics in motion (tentative)
Full title of journal	(to be ascertained)
Refereed journal yes/no	Yes
Year	2013
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Taye Alemayehu, Frank van Steenbergen, Seifu Kebede
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Status (in preparation, submitted, in press)	in preparation
Title of article	Irrigation development in Ethiopia for small farmers - operational challenges first
Full title of journal	(to be ascertained)
Refereed journal yes/no	Tbd
Year	(to be ascertained)
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Kifle Woldearagay, Frank van Steenbergen, Ermias
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Status (in preparation, submitted, in press)	in preparation
Title of article	Hydrogeology of Raja and Kobo basins
Full title of journal	(to be ascertained)
Refereed journal yes/no	Tbd
Year	(to be ascertained)
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Kifle Woldearagay, Nata, Dessi
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Relating to the work in Palestinian Territories

Status (in preparation, submitted, in press)	in preparation
Title of article	History of Water Diplomacy between Palestine and Israel (tentative)
Full title of journal	(to be ascertained), probably Internationale Spectator
Refereed journal yes/no	Yes
Year	2012
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Ebel Smidt a.o.
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Status (in preparation, submitted, in press)	in preparation
Title of article	Hydrogeology of the Qalqilya Area (tentative)
Full title of journal	(to be ascertained)
Refereed journal yes/no	Tbd
Year	2013
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Omar Zayed, Deeb Abdelghafour, Ebel Smidt, Janbert Aarnink
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Status (in preparation, submitted, in press)	in preparation
Title of article	Water use by cooperatives in the Qalqilya area: state of the art and improvements (tentative)
Full title of journal	(to be ascertained)
Refereed journal yes/no	tbd
Year	2013
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Omar Zayed, Machteld Galema, Ebel Smidt
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Status (in preparation, submitted, in press)	conceptualized
Title of article	Water management in Palestine in the context of conflict and cooperation
Full title of journal	(to be ascertained)
Refereed journal yes/no	Yes
Year	(to be ascertained)
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Karen Assaf, Shaddad Attili, Ebel Smidt , Erik Mostert
URL	(to be ascertained)
Open Access yes/no	(to be ascertained)

Status (in preparation, submitted, in press)	Published in Dutch – will be upgraded to an English version
Title of article	Zwarte zwanen in mediation
Full title of journal	Tijdschrift Conflictantering
Refereed journal yes/no	No
Year	2011

Volume (part) e.g. 2(3)	No.8
Start page + end page	47-50
Author(s) <i>Please include all authors</i>	Ebel Smidt
URL	http://www.tijdschriftconflicthantering.nl/
Open Access yes/no	No

Relating to the work in Yemen

Status (in preparation, submitted, in press)	Published
Title of article	Groundwater security in Yemen: Who is accountable to whom?
Full title of journal	Law, Environment and Development Journal
Refereed journal yes/no	Yes
Year	2011/2012
Volume (part) e.g. 2(3)	7/2
Start page + end page	164
Author(s) <i>Please include all authors</i>	Frank van Steenbergen; Omar Bamaga and Adel Al-Weshali
URL	http://www.lead-journal.org/content/11164.pdf
Open Access yes/no	yes

Status (in preparation, submitted, in press)	Submitted and provisionally accepted
Title of article	Local Groundwater Governance in Yemen: Building on Traditions and Enabling Communities to Craft New Rules
Full title of journal	Hydrogeology Journal
Refereed journal yes/no	Yes
Year	2011/2012
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Taha Taher, Bryan Bruns, Omar Bamaga, Adel Al-Weshali, and Frank van Steenbergen
URL	
Open Access yes/no	No

Status (in preparation, submitted, in press)	Submitted
Title of article	The social dynamics of groundwater depletion – a longitudinal view from Kuchlugh (Pakistan)
Full title of journal	Human Ecology
Refereed journal yes/no	Yes
Year	2011/2012
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Frank van Steenbergen, Allah Bux Kaisrani, Naimat Ullah Khan and Mohammed Shamshad Gohar
URL	
Open Access yes/no	No

Status (in preparation, submitted, in press)	In preparation
Title of article	Water diesel economics during the political conflict of 2011 in Yemen
Full title of journal	
Refereed journal yes/no	

Year	2013/4
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Omar Bamaga, AS Babaqi
URL	
Open Access yes/no	

Status (in preparation, submitted, in press)	In preparation
Title of article	Environmental refugees and groundwater depletion in Al Mujelis – Yemen
Full title of journal	
Refereed journal yes/no	
Year	2013
Volume (part) e.g. 2(3)	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Simon Chevalking, AS Babaqi, Adel Al Weshaly
URL	
Open Access yes/no	

2) Book chapters (contributions to scientific books aimed at an academic audience)

CoCooN Book

Status (in preparation, submitted, in press)	Submitted
Title of book	Conflict and Cooperation over Natural Resources in Developing Countries
Title of chapter	The Politics of Conflict, Cooperation and Void in Groundwater Management
Publisher	NWO
City (of publisher)	Den Haag
Year	(to be ascertained)
Edition	(to be ascertained)
ISBN number	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Erik Mostert, Ebel Smidt, Frank van Steenbergen, Rozemarijn ter Horst
Editor(s)	Erik Mostert and others
URL	www.nwo.nl/cocoon
Open Access yes/no	Yes

Status (in preparation, submitted, in press)	Submitted
Title of book	SPRING
Title of chapter	Chapter 6: Groundwater Management – Social and Political Action
Publisher	IUCN
City (of publisher)	Gland
Year	2012
Edition	(to be ascertained)
ISBN number	(to be ascertained)
Start page + end page	(to be ascertained)
Author(s) <i>Please include all authors</i>	Frank van Steenbergen, Nawal El Haouari
Editor(s)	Mark Smith
URL	www.iucn.org
Open Access yes/no	Yes

3) Monographs (books written for an academic audience which describe the result of academic research)

None yet

4) PhD Thesis

Status (in preparation, submitted, in press)	In preparation
Title of thesis	Role of mediation in groundwater management ³
Publisher	(To be ascertained)
City (of publisher)	(To be ascertained)
Year publication	2013/4
Edition	(To be ascertained)
ISBN number	(To be ascertained)
Promotion organisation	(To be ascertained)
Promotion date	(To be ascertained)
Author(s) <i>Please include all authors</i>	Ebel Smidt
URL	(To be ascertained)
Open Access yes/no	Yes

5) Conference papers (complete version of an article published in the context of a conference)

Status (in preparation, submitted, in press)	printed (in conference papers)
Title of product	Informing and Enabling Local Ground Water Governance for Yemen
Author(s) <i>Please include all authors</i>	Taha Taher, Bryan Bruns, Omar Bamaga, Adel Al-Weshali, and Frank van Steenberg
Title of the conference	The National Conference on Management and Development of Water Resources in Yemen
Organisation	Sheba Center for Strategic Studies
City/Country	Sana'a / Yemen
Dates of the conference	January 15-17, 2011
URL	http://shebacss.com/water/
Open Access yes/no	No

6) Professional publications and other output (publications aimed at professionals in the public and private sector – “knowledge users”)

None yet

³ This PhD will make use of the CoCoon outputs – though the PhD itself is not funded from CoCoon.

7) Publications aimed at the general public (popular publications about the results of scientific research aimed at a lay audience)

Status (in preparation, submitted, in press)	out now
Sort of product (e.g. newspaper article, radio programme, TV broadcast)	Video series in English and Arabic (funded by EKN in Sana'a)
Title of product	Building on Practice: Case studies in local water management from Yemen - Al-Sinah: The Remarkable Groundwater Story of a Co-operative Society (Arabic) - Beni Hushaish-Effective, innovative groundwater recharge - Kharabat- Protecting Springs and Groundwater Resources - Nahem: Protecting Wells and Water - Sharing water in Yemen
Author/Producer	MetaMeta, Levert Communications and Water & Environment Centre
Published in (name of newspaper, TV programme, etc.)	www.thewaterchannel.tv and DVD
Publisher	MetaMeta Communications
City (of publisher)	Wageningen
Date of publication	November 2011
URL	www.thewaterchannel.tv
Open Access yes/no	yes

8) Patents

None yet

9) Other research output (e.g. visuals, abstracts, editorships, inaugural lectures)

None yet – this is planned for year 2. In the second part of year 2 the plan is to develop a broader set of communication outputs and a strategy of using it in the political action plans.

Annex I - Logframe

Overall objective	Indicators (impact)		
Contribute to pro-active and effective groundwater management in three countries, i.e. Yemen and Palestinian Territory, where it is under considerable stress, and Ethiopia, where groundwater development is fast emerging – as contribution to broader political awareness raising on groundwater governance.	Indicators for more effective groundwater management: <ul style="list-style-type: none"> • % of groundwater extraction in line with recharge • Level of groundwater table maintained • More fair access to groundwater resources • # of conflicts over groundwater use 		

Specific objectives	Indicators (outcome)	Expected results	Indicators (output)
Development 1. Promote better and more effective groundwater management by engaging those operating in the political domain	<ul style="list-style-type: none"> • # of statements and decisions by identified decision makers on more effective groundwater management 	Action plans preparation: Investigate measures that can be taken in the interface between the political, institutional and economic/ hydrological domain Implement action plans to effectively engage political domain Replication / upscaling of experiences with different approaches and tools for engaging the political domain in other situations	<ul style="list-style-type: none"> • # of action plans developed with measures in the interface between the political, institutional and economic/ hydrological domain (presentations, meetings with different players, briefings, use of media) • # of (above) action plans implemented • # of areas where measures emanating from best practices with action plans are applied
Research 2. Actionable and scientifically based understanding of improving groundwater governance – in other words moving into the ‘political black box’	<ul style="list-style-type: none"> • # of publications on groundwater governance • Publication of final peer reviewed book on groundwater governance, accompanied by practical notes and video documentation 	Understand response or non-response from political domain to pressures and potential in groundwater development Understand institutional domain: effectiveness default/ laissez passer, conflict and cooperation as political strategies Assess effectiveness of conflict and cooperation on the basis of hydrological performance	<ul style="list-style-type: none"> • # of studies on policy and power networks verified and reviewed by scientific community • # of institutional assessment studies undertaken with results verified and reviewed by scientific community, for three countries – with different priorities for each country • # of focus area studies undertaken, with results verified and reviewed by scientific community
Capacity building 3. Make a larger group of water management experts more astute and capacitated in operating not only in technical and institutional domain but also in political domain.	<ul style="list-style-type: none"> • # of water professionals with capacities on how to connect the technical/ institutional with the political agenda, and by identifying specific actions 	Improved acumen of the entire research team Short course module on conflict and cooperation and activating the political domain in groundwater management Course provides to practitioners and postgraduates	<ul style="list-style-type: none"> • # of effective interactions from members with decision powers • Course available both generic and tailored to three countries • # of practitioners and postgraduates

Create a larger drive to change things for better groundwater management and fairer access			participating in course
--	--	--	-------------------------