

## SUITE OF DISSEMINATION PRODUCTS

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## Deliverable 6.4: Suite of Dissemination Products Overview Report

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### Introduction

Dissemination activities were built into the WAHARA project design to build continuous engagement with a variety of target groups at multiple levels, whose activities have a bearing on the use, management and spread of water harvesting technologies as well as on agricultural productivity. In keeping with the different needs, preferences, and roles of the different target groups in these processes, a suite of dissemination products was built up over the project period, comprising of a variety of media. A list of dissemination activities and products is included in the final report, and is also provided in the Annexes of this document. Below a summary is given, ordered by type of output.

### Dissemination Media and Outputs

**Website:** The website ([www.wahara.eu](http://www.wahara.eu)) was used to disseminate project news, knowledge, and data across project partners. It served to inform project partners about relevant developments within the project, but apart from that is also served as a user-friendly platform that hosted all WAHARA deliverables to a global audience. All WAHARA reports can be downloaded from the website without the use of a password.

**Stakeholder workshops:** Study site coordinators carried out 2 stakeholder workshops each. The workshops brought together the stakeholders to inform them about the WAHARA project, to seek their inputs on the choice of WHTs for field experiments, as well as to share progress and discuss results. Selected stakeholders from the 4 countries also attended the project completion meeting in Livingstone, Zambia. As part of this meeting they visited the Zambia field experiment site, they met the Zambian farmers and were presented the overall project results. (Please refer to Annex 1 for details)

**Presentation of WAHARA results at regional/international fora:** WAHARA project results were presented at the following international research events:

- Expo 2015 (Milan, Italy, June) : A presentation was made by Cecilia Borgia, MetaMeta at a workshop titled '*Coping with climate change and water scarcity in Africa and Europe: improving monitoring and water-use efficiency in agriculture*'
- WOCAT Annual Symposium 2015; (Feldafing, Germany, June) A brief presentation made by Abraham Abhishek, MetaMeta, as well as distribution of WAHARA promotional material among members of the WOCAT international
- Tropical Agriculture Organization Meeting "Land Degradation and Agriculture Frontiers in Africa" (Newcastle, UK, 23 March, 2012) A presentation was given by Luuk Fleskens, with the title 'Prospects for conserving land in desertification hotspots around the world.'
- EGU Annual Meeting 2012 (Vienna). A presentation was given by Mike Kirkby, entitled 'Regional assessment of Groundwater Recharge and Water Harvesting potential in semi-arid lands.'
- RGS-IBG Annual Conference 2012 (4 May, 2012, Edinburgh). A presentation was given by Luuk Fleskens: 'Food security under climate change: building resilience of African dryland agriculture through water harvesting'

- AGU Fall Meeting 2013 (9-13 December 2013, San Francisco). Presentation by Sarah Lebel: Assessing the potential of rainwater harvesting to sustain livelihoods in Sub-Saharan Africa under climate change
- The 5th International Conference on Deserts, Drylands & Desertification (Sede Boquer, Israel, 20 November 2014). Presentation by Luuk Fleskens: 'The potential of rainwater harvesting for African agriculture to improve food security and adapt to a changing climate'
- EGU 2015 (Vienna). Presentation by Brian Irvine: Climatic and agricultural drivers of soil erosion in Africa
- EcoMod2015 (Boston USA, 15-17 July 2015). Presentation by Mohamed Arbi Abdeladhim: Assessing climate change impacts on sustainable development at the regional level: a case study of the province of Medenine south-east of Tunisia
- The International conference on 'Integrated Land and Water Resources Management in the Dry Areas under Climate Change' (Djerba, 11-14 May 2015). Presentation by Mohamed Arbi Abdeladhim: Regional impact of climate change: An application of Multi-criteria analysis
- 1<sup>st</sup> International Conference Afro-Mediterranean Soils (Marrakech – Morocco, 18/19 December 2015). Presentation by M. Ben Zaied: Constrains and Potentialities for Durable Management
- Cotonou Benin (September 16-19 th 2011). Presentation by Hamado Sawadogo: Dégénération des sols: Quel avenir pour les petits producteurs d'Afrique Subsaharienne dans un contexte de changement climatique
- Florida, USA (8-9 december 2011). Presentation by Hamado Sawadogo: Rehabilitation of degraded land by using Soil and Water Conservation in the North western part of Burkina Faso
- Ouahigouya, Burkina Faso (December, 15- 18, 2012). Presentation by Hamado Sawadogo: Technologies de gestion de l'eau et des sols pour l'adaptation aux changements climatiques
- Washington, USA (10-15 january 2013). Presentation by H. Sawadogo: Effects of microdosing and soil and water conservation techniques on securing crop yields in the north western Burkina Faso

**Briefings and Compendiums:** 5 banners were prepared, each presenting a brief summary of the project activities and findings from the 4 countries. These were made by MetaMeta in collaboration with study site partners. They were presented at the final WAHARA meeting. A compendium in easy-to-read magazine format was prepared based on Deliverable 6.2 (*'Multi-level Strategy for the Spread of WHTs in Africa'*), outlining a vision for Water Harvesting in Africa. The compendium was distributed among participants at the project completion meeting. Study Site Coordinators were provided around 50 copies each for dissemination in their respective countries. The banners were also handed over to them for display and dissemination at their offices and WHT-related events they would be part of. (Please refer to Annex 2)

**Targeted policy advice and recommendations:** Specific policy advice and recommendations were provided through three policy briefs and 1 compendium (mentioned above). The topics addressed include

- Actor-specific recommendations for facilitating the spread of WHTs in Africa
- Bench Terraces for creating new lands and new livelihoods for women and youth
- Supporting farmer-Farmer Learning Systems

Government policy was advised throughout the project through the close involvement of government agencies in the field experiments. In Ethiopia, for example, project work involved working with a regional government that was constructing bench terraces on hillside land, informing its action by sharing findings of monitoring of their performance. In the other 3 study countries, WAHARA partners also have close connections with policy makers at regional level.

**Videos:** A total of **33 videos** were produced over the project period. The videos documented the project context and project results in the 4 study sites. They were disseminated online through TheWaterChannel ([www.thewaterchannel.tv](http://www.thewaterchannel.tv)) where they got a combined **221,740 views** (as of March 16, 2016). This mode of outreach was among the demographic that covers water managers, students, academics, and general enthusiasts (based on visitor profile of TheWaterChannel).. A shortened version of the documentary '[Land,](#)

[Water and Livelihoods: The Watershed Movement in Tigray](#) was broadcast on TV3 in Spain in March, 2012. (Please refer to Annex 3 for a complete list of videos and online links).

**Offline dissemination of the videos** was carried out by developing 3 compilations on DVDs and distributing them among key stakeholders. This could be done mostly in Ethiopia, as support by local stakeholders to distribution efforts was forthcoming. The 3 packages included:

- Land, water and livelihoods: The watershed movement in Tigray (the documentary mentioned above)
- Soil conservation and water harvesting in Tigray, Ethiopia (a set of 10 videos documenting WHTs being implemented in and around the test site in Ethiopia, see Annex 3 for the list of videos)
- Managing land, water and people: insights from Ethiopia (a compilation of 5 video lectures relevant to Ethiopia, see Annex 3 for the list of videos)

Please see Annex 5 for the DVD labels.

**Articles in magazines:** An article was published in the online and offline versions of the magazine 'Farming Matters,' analysing the changes brought about by intense water harvesting and soil conservation efforts carried out in Tigray, Northern Ethiopia (where the WAHARA test site is located). The article also mentions WHTs selected by WAHARA and cites its website as a resource for further reading. The article was co-authored by Frank van Steenbergen (WP6 team) and Kifle Woldearegay (Ethiopia Study Site Coordinator).

References:

Marta, A., Woldearegay, K., van Steenbergen, F. 2015. A Watershed Evolving. *Farming Matters*, 31(3), p.34-36

Also available online at: <http://www.agriculturesnetwork.org/magazines/global/wisdom-of-water/watershed-management>

Another article was published in Horizon Magazine, based on a.o. an interview with Kifle Woldearegay. The article was called 'Harvesting water in Ethiopia' was published on 7 October 2015, and is available online at: [http://horizon-magazine.eu/article/harvesting-water-ethiopia\\_en.html](http://horizon-magazine.eu/article/harvesting-water-ethiopia_en.html)

An online article was published on the Horizon website, based on an interview with Rudi Hessel. The article was called 'A new harvest for Africa' and is available at: <https://ec.europa.eu/programmes/horizon2020/en/news/new-harvest-africa>

**Support to Publications:** WAHARA research was used to support the publication of 2 books- '*Securing Water and Land in the Tana Basin (2012)*' and '*Transforming Landscape, Transforming Lives: the Business of Sustainable Water Buffer Management (2011)*' The books were published by the 3R Water Secretariat.

The books compiled good practices in Water Harvesting and Soil Conservation that had brought about discernible changes at the landscape level in various countries across the world. WAHARA research results up until that point (drawing mostly upon findings of the stakeholder workshops and selection of technologies) were used as a basis to analysing select techniques and practices. The WAHARA project was acknowledged as having supported the publications on the inside covers.

References:

Knoop L., Sambalino, F, and van Steenbergen, F. 2012. *Securing Water and Land in the Tana Basin: a resource book for water managers and practitioners*. Wageningen, The Netherlands: 3R Water Secretariat

Steenbergen, F. van, Tuinhof A., and L. Knoop. 2011. *Transforming Lives Transforming Landscapes. The Business of Sustainable Water Buffer Management*. Wageningen, The Netherlands: 3R Water Secretariat

(Also available at [www.bebuffered.com](http://www.bebuffered.com))

WAHARA also contributed to the book '*Water Harvesting in Sub Saharan Africa*' written by W Critchley & J Gowing (2012). Kifle Woldearegay was co-author to chapter 7 of that book '*Ethiopia: opportunities for building on tradition – time for action.*'

## Annex 1: Dissemination Activities Carried out by Study Site Coordinators

Activities for	Tunisia	Burkina Faso	Ethiopia	Zambia
<i>Stakeholders</i>	-2 stakeholder workshops	-2 stakeholder workshops	-2 stakeholder workshops; several additional meetings with various local organisations.	-2 stakeholder workshops  -Organising of the WAHARA Completion Meeting 2016
<i>Practitioners</i>	Procedure of Water harvesting technologies evaluation and selection		-Second Workshop Report on Participatory Selection of Water Harvesting Technologies	
<i>Farmer organisations</i>		Folk Theatre		
<i>Local – national authorities</i>			-Policy brief <i>'Bench Terraces: Creating cultivable land to ensure livelihoods for women, youth'</i>  - Policy Workshop Reports	
<i>Scientists</i>	-Scientific Papers: <b>2</b> accepted; <b>6</b> submitted/ under review; <b>2</b> in draft stage	-Scientific Paper: Several titles in draft stage	-Scientific Paper: Several titles in draft stage	
<i>All stakeholders (incl. general public)</i>		Production and screening of film <a href="#"><i>'Des Technologies d'adaptation aux changements climatiques'</i></a>	Distribution of DVD packages (See Annex 4)	Inviting neighbouring farmers to test sites to view experiment results



## Annex 2: Posters and Compendiums

**Adapting technologies**  
**Farmer innovators**  
**Sharing experiences**

**Exchanging knowledge**

**Cross-country sharing**  
 Zai pits are traditional planting pits from Burkina Faso that help concentrate moisture and target fertilizer right at the root of the plant. They were tested in Tunisia and proved to help the installation of young trees when combined with traditional water harvesting techniques like jessours and Tabla. This adaptation is crucial for a water-stressed country, where farmers innovate constantly to economize water-use.

WAHARA (Water Harvesting in Rainfed Africa) is an international research project carried out in the north (Tunisia), east (Ethiopia), south (Zambia), and west (Burkina Faso) of Africa. It has identified and field-tested promising technologies; assessed the potential of their uptake; and outlined a strategy to promote spreading them across the continent.

WAHARA  
 WITH IMPACTS IN AFRICA

8 | 1 of 1

**Transferring technologies**  
**Participatory technology development**  
**Sharing experiences**  
**Champion farmers**

**Learning from each other**

**Transfer of technology**  
 Farmers in northern Burkina Faso tested the Magoye Ripper, a land preparation tool developed in southern Zambia which helps conserve soil moisture. Developers of the tool in Zambia incorporated their feedback into the Kapandula, a ripper adapted to the harder, drier soils that Burkinabe farmers are up against.

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WAHARA  
 WITH IMPACTS IN AFRICA

**Exchanging knowledge**

**Adapting technologies**  
**Farmer innovators**  
 Sharing experiences

**Cross-country sharing**

Zaif pits are traditional planting pits from Burkina Faso that help concentrate moisture and target fertilizer right at the root of the plant. They were tested in Tunisia and proved to help the installation of young trees when combined with traditional water harvesting techniques like Jessours and Tabla. This adaptation is crucial for a water-stressed country, where farmers innovate constantly to economize water-use.

**WAHARA**  
 WATER HARVESTING IN RAINFED AFRICA

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**Transforming Landscapes**

**Transferring technologies**  
**Creating water buffers**  
 Sharing experiences  
 Changing watersheds

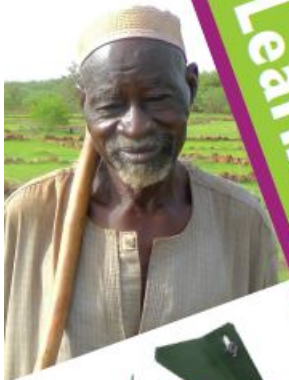
**Bench Terraces**

In Ethiopia, Bench Terraces integrated with water sources were identified as a promising technology and tested in the northern Tigray province. First tried in 2013, they are now valued for their potential to create new cultivable land in hilly terrain. The regional government has now given top priority to Bench terraces. It has been distributing the new land among landless youth for growing high-value crops.

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# Learning from each other

**Transferring technologies**

**Participatory technology development**

**Sharing experiences**

**Champion farmers**



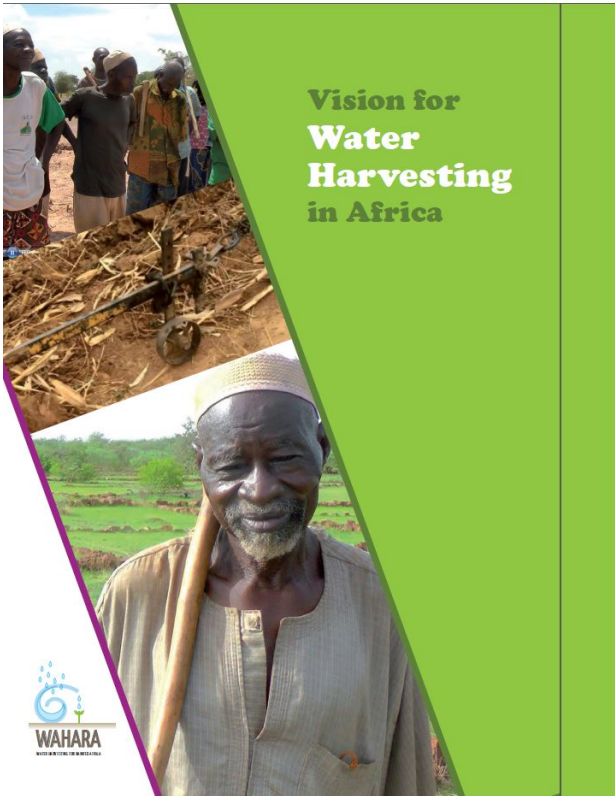
### Transfer of technology

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## Vision for Water Harvesting in Africa



### A Vision for Water Harvesting in Africa

Africa has been identified as a global 'hotspot' for water-constrained, rain-fed agriculture. The continent is home to 100 million people living in such environments, with most of them concentrated in a band running through Senegal, Mali, Burkina Faso, Niger, Nigeria, Chad, Sudan, Ethiopia, Somalia, Kenya, Tanzania, Zambia, Malawi, Mozambique, Zimbabwe and South Africa.<sup>2</sup>

This situation lends itself to water harvesting (WH) being a logical coping strategy. Moreover, given that Africa's largely rain-fed agriculture is its single most important economic driver<sup>3</sup>, WH provides the opportunity to turn these 'hotspots' into 'hope-spots'<sup>4</sup> that will lead the way to agriculture-led development. A key aim that the African Union is trying to realize through its Comprehensive Africa Agriculture Development Programme (CAADP)<sup>5</sup>. In many of the hotspots, WH has been identified as the most appropriate way to replenish and nourish the natural resource base and reverse desertification. By supporting sustainable development and poverty reduction, WH will be an important instrument for achieving resilience and, by extension, for achieving Disaster Risk Reduction. This has been demonstrated in

Burkina Faso's northern Yatenga province, where smallholder farmers revived an ancient field-level WH called *Zai* pits to plant trees and reclaim land affected by desertification. Their efforts at reforestation have proven to be much more effective than government/ NGO-led tree planting campaigns in the past. This shows how WHTs can spread through the agency of rural communities.

Thus, a vision for Water Harvesting in Africa is that of a continent where countries are harnessing the proven potential of WHTs to capitalise on their vast natural resources for sustainable development, peace, and prosperity. This vision guides the recommendations made by this document.

### Upscaling of WHTs: The Process

In the context of WHTs, upscaling in general refers to achieving their increased diffusion and implementation. The end objective is on-the-ground implementation over a large area by a large number of land users. There are different routes to take concerning upscaling, as explained in box 1.

Those concerned with upscaling of WHTs would do well to recognize that the process can be driven in several different ways, by several different actors. So while the



Transforming landscape at scale in short time span (photo credit: Tigray Bureau of Agriculture and Rural Development)



Jessour: a water harvesting system comprising of small basins, terraces, and dykes - used for collecting runoff from long slopes. In the mountainous areas in Tunisia this technique is used in agriculture. (photo credit: www.douiret.net)

improve. Besides, the simple nature of WHTs makes it possible for farmers to engage in their development and adapt them according to their needs.

All these factors highlight that spread and upscale of WHTs should be intrinsically simple. This also means that the limiting factor is often the willingness to invest in the technology, rather than the size of the investment. What inhibits the willingness to invest? Examples from Burkina Faso show that with all their good intentions, the natural inclination of the government and NGOs was towards technology-intensive, large-scale measures such as catchment-wide earth bunds, *Zai* Pits and Stone Lines were only recognised as worthwhile investments when scientists and policymakers took notice of how innovative farmers were using them to reclaim unproductive land. A lesson this holds is that willingness to invest in WHTs can be cultivated, and facilitating regular exchanges between farmers and other stakeholders is one of the ways. This is also an argument in favour of Participatory Technology Development for agriculture to ensure that research is sufficiently informed by farmers' needs as well as contributions.

### Technology: Level of Application

WHTs include solutions for treating landscapes, such as check dams, bunds, storage structures, as well as field-level measures to retain and improve soil moisture in-situ— such as *Zai* pits, half-moons, stone

lines, ripping, etc. In Ethiopia, landscape-level application of WHTs has been carried out with much success.<sup>6</sup> On the contrary, there is greater emphasis on field-level technologies in Zambia and Burkina Faso. This reflects different biophysical conditions, different needs, and different priorities across different countries.

The general point to be made here is that both sets of technologies and approaches perform complementary functions and there is usually a simultaneous need for both. As mentioned under the previous point (Willingness to Invest) for a long time governments, NGOs, and researchers have shown a preference for landscape-level WH. However, as the Burkina and Zambia cases show, promoting field-level WHTs can go a long way towards reclaiming land and increasing farm productivity.

### Communication

Radio programs in Tunisia and *La Voix du Paysan* in Burkina Faso<sup>7</sup> represent attempts to creatively use radio to facilitate transfer of agricultural knowledge. At the core of the utility offered by the audiovisual medium is their accessibility to those with low literacy levels (as a large number of farmers across Africa have).

Another way of managing the literacy barrier is a less-discussed area of intervention with great potential of impact— developing learning material tailored to farmers' needs. Using language-neutral graphics, video and audio mediums, it is possible to generate instructional manuals and learning material that are useful to farmers. A global review of extension methods and aids highlight the large potential of innovative media tools such as participatory video.<sup>8</sup> Digital Green, which is based in Ethiopia, is one example.<sup>9</sup>

At the same time, the traditional rural media such as folk theatre should be harnessed as is being done in Burkina Faso. Outreach efforts of government agencies, research organisations, and NGOs, however so far, seldom utilise them.

### Education

A common refrain across the four WAHARA countries was that there is an acute shortage of good quality data and rigorous studies on the impact of WHTs, for example in Burkina Faso.<sup>10</sup> Research institutions stand



Radio station *La Voix du Paysan* in Burkina Faso uses their channel to facilitate share agricultural knowledge.

to gain much in terms of filling these gaps by collaborating more closely with individual farmers, farmer organisations, and farmer-to-farmer learning systems. Farmers, in return, can also benefit from good quality data informing their decision-making.

In particular, there is a great need to increase linkages between farmers and educational institutions such as universities, colleges and vocational training centres. Many do their PhD research on Water Harvesting. Many Masters programs discuss WHTs. And this is great," says Douglas Moono, Director, GART. "However, there is a great need to discuss these topics more at the undergraduate level and vocational schools. It is these schools that cater to those engaged in extension work; those who work with farmers at the grassroots level," he says.

### Call to Action

It is a clichéd expression, but the core ideas extracted from experiences in Tunisia, Ethiopia, Zambia, and Burkina Faso point to one thing: what works is putting the farmer at the centre of it all, respecting his agency, treating him as a client rather than a beneficiary. The spread of WHTs among farmers should essentially be a process of pitching WHTs to them. When farmers are convinced about their benefits to productivity and income, they will take them up, innovate and adapt them to their specific needs. That's when WHTs truly spread. This core process can be supported by securing farmers' land rights, facilitating farmer-to-farmer learning systems and linking them with formal education & research systems.

All this requires investments, and it is essential that there is willingness to make those investments. The evidence base of the impact and potential of WHTs is robust. The need of the hour is to translate it into investments, which requires reaching it out to more and more farmers, governments, NGOs, students, academics and getting their buy-in.

## **Annex 3: WAHARA Video Productions**

[Land, Water and Livelihoods: The Watershed Movement in Tigray](#)  
[Roads as Dams: Burkina Faso](#)

[Ethiopia: Transforming Landscapes](#)

[Burkina Faso: Cradle of Farm-level Water Harvesting Technologies](#)

[Zambia: Conservation Farming](#)

[Jessour Water Harvesting structures applied in Tunisia](#)

### **WAHARA Small Videos (10)**

- [Micro Basins](#)
- [Stone Bunds](#)
- [Spring development in Tigray](#)
- [Spate Irrigation in Northern Ethiopia](#)
- [Micro-Dams](#)
- [Gully Treatment in Tigray](#)
- [Hand-dug Wells](#)
- [Area Closure](#)
- [Night Storage of Irrigation Water](#)
- [Diversion Weirs](#)

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- [Micro Basins](#)
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- [Micro-Dams](#)
- [Gully Treatment in Tigray](#)
- [Hand-dug Wells](#)
- [Area Closure](#)
- [Night Storage of Irrigation Water](#)
- [Diversion Weirs](#)

### **Presentations recorded in 2012 at Wageningen meeting**

- [Mike Kirkby: Continental-scale Quick-Scan Tool Development](#)
- [WOCAT Technologies and Approaches, Ethiopia](#)
- [Technologies selected and their justification, Zambia](#)
- [Existing and potential water harvesting Tunisia \(presentation\)](#)
- [Evolution of Ripping as a Land Preparation Method](#)

### ***Various webinars***

2011: [Innovations for Food Security: The Business of Sustainable Land and Water Management](#)

**Annex 4: Overview of project dissemination activities (status 21 April 2016).** Note that some last minute additions could not be included in this deliverable anymore; they are however included in the final report.

Nº	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
1	Oral presentation to a scientific event	UNIVERSITY OF LEEDS	The potential of rainwater harvesting for African agriculture to improve food security and adapt to a changing climate	20/11/2014	Sede Boquer, Israel	Scientific community (higher education, Research) - Policy makers	30	Burkina Faso, Ethiopia, Tunisia, Zambia
2	Posters	UNIVERSITY OF LEEDS	Assessing the potential of rainwater harvesting to sustain livelihoods in Sub-Saharan Africa under climate change	11/12/2013	San Francisco, USA	Scientific community (higher education, Research)	100	Burkina Faso
3	Oral presentation to a wider public	METAMETA RESEARCH B.V.	Water Harvesting for Rainfed Africa	17/06/2015	Milan	Scientific community (higher education, Research) - Civil society - Policy makers	100	Multiple
4	Organisation of Workshops	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	WAHARA project	10/02/2016	Livingstone, Zambia	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	40	Tunisia, Burkina Faso, Ethiopia, Zambia
5	Interviews	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	for article 'A new harvest for Africa' on <a href="https://ec.europa.eu/programmes/horizon2020/en/news/new-harvest-africa">https://ec.europa.eu/programmes/horizon2020/en/news/new-harvest-africa</a>	23/02/2015	Wageningen (by phone)	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	10000	EU, but accessible to all
6	Films	METAMETA RESEARCH B.V.	WAHARA mentioned in film EU: <a href="https://www.youtube.com/watch?feature=player_embedded&amp;v=PlcPalmHoww">https://www.youtube.com/watch?feature=player_embedded&amp;v=PlcPalmHoww</a>	04/06/2015	Brussels	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	10000	EU, but accessible to all
7	Interviews	MEKELLE UNIVERSITY	interview for article in Horizon Magazine 'Harvesting water in Ethiopia', published 7 Oct 2015	01/05/2015	Mekelle (by phone)	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	10000	EU, but accessible to all
8	Organisation of Workshops	INSTITUT DES REGIONS ARIDES	stakeholder analysis workshop on potential WH in the Tunisian study site	17/06/2011	Zammour, Beni Khedache	Civil society - Policy makers	24	Tunisia
9	Videos	INSTITUT DES REGIONS ARIDES	Existing and potential water harvesting Tunisia (presentation)	18/11/2012	Wageningen	Medias	1000	All



Nº	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
10	Organisation of Workshops	INSTITUT DES REGIONS ARIDES	Joint WAHARA-AFROMAISON plenary meetings	21/04/2013	Djerba, Tunisia	Scientific community (higher education, Research) - Civil society - Policy makers	60	17 countries represented
11	Organisation of Conference	INSTITUT DES REGIONS ARIDES	The International conference on Integrated Land and Water Resources Management in the Dry Areas under Climate Change	14/05/2015	Djerba, Tunisia	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	250	15 countries represented
12	Oral presentation to a scientific event	INSTITUT DES REGIONS ARIDES	Assessing climate change impacts on sustainable development at the regional level: a case study of the province of Medenine south-east of Tunisia	17/07/2015	EcoMod2015, Boston, USA	Scientific community (higher education, Research)	200	All
13	Oral presentation to a scientific event	INSTITUT DES REGIONS ARIDES	Regional impact of climate change: An application of Multi-criteria analysis	14/05/2015	conf Integrated Land and Water etd, Djerba, Tunisia	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	250	15 represented
14	Oral presentation to a scientific event	INSTITUT DES REGIONS ARIDES	Attempts at Synergies between AFROMAISON and WAHARA Projects (Case study of Watershed of Oum Zessar, Tunisia.)	21/04/2013	Djerba, Tunisia	Scientific community (higher education, Research) - Civil society - Policy makers	60	17 represented
15	Posters	INSTITUT DES REGIONS ARIDES	Integrated impact assessment of livelihood & water management practices in Oum zessar watershed	26/09/2014	Hammamet, Tunisia	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	100	Tunisia
16	Posters	INSTITUT DES REGIONS ARIDES	Contribution à l'évaluation d'impact du changement climatique sur la durabilité dans le gouvernorat de Médenine: Application dun modèle déséquilibre général calculable.	14/05/2015	Djerba, Tunisia	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	250	15 represented
17	Posters	INSTITUT DES REGIONS ARIDES	3rd workshop on water resources in Developing Countries	08/05/2015	Triest, Italy	Scientific community (higher education, Research)	50	7 represented
18	Oral presentation to a scientific	INSTITUT DES REGIONS ARIDES	1st International Conference Afro-Mediterranean Soils: Constrains and Potentialities	19/12/2015	Marrakesh, Morocco	Scientific community (higher education, Research)	150	9 represented

Nº	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
	event							
19	Videos	UNIVERSITY OF LEEDS	Continental-scale Quick-Scan Tool Development	18/09/2012	Wageningen	Medias	1000	All
20	Videos	UNIVERSITY OF LEEDS	Impact assessment of water harvesting technologies using PESERA-DESMICE	22/04/2016	Wageningen	Medias	1000	All
21	Organisation of Conference	UNIVERSITY OF LEEDS	Conference session RGSIBG 2012: How to secure water and food security across African landscapes under climate change?	04/05/2012	Edinburgh, UK	Scientific community (higher education, Research)	80	25 represented
22	Oral presentation to a scientific event	UNIVERSITY OF LEEDS	Prospects for conserving land in desertification hotspots around the world	23/03/2012	TOAM meeting, Newcastle, UK	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	60	10 represented
23	Oral presentation to a scientific event	UNIVERSITY OF LEEDS	Regional assessment of Groundwater Recharge and Water Harvesting	27/04/2012	EGU 2012, Vienna, Austria	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	40	about 15 present
24	Oral presentation to a scientific event	UNIVERSITY OF LEEDS	Food security under climate change: building resilience of African dryland agriculture through water harvesting	04/05/2012	RBSIBG meeting, Edinburgh, UK	Scientific community (higher education, Research)	80	25 countries
25	Oral presentation to a scientific event	UNIVERSITY OF LEEDS	Climatic and agricultural drivers of soil erosion in Africa	17/04/2015	EGU 2015, Vienna, Austria	Scientific community (higher education, Research)	40	about 15 countries
26	Oral presentation to a scientific event	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	WAHARA project	20/12/2012	brief WAHARA info at Africa Cluster meeting, Brussels	Scientific community (higher education, Research) - Policy makers - Medias	25	10

Nº	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
27	Oral presentation to a scientific event	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	Water HARvesting for Rainfed Africa (WAHARA) investing in dryland agriculture for growth and resilience	25/02/2014	project coordinator meeting, Wageningen	Scientific community (higher education, Research)	10	4
28	Interviews	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	for film 'Agriculture, water and climate change in Africa'; footage not used in film	17/05/2013	Brussels	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	5	none, as footage was not used by film maker
29	Organisation of Workshops	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	stakeholder analysis workshop on potential WH in the Burkina Faso study site	16/07/2011	2 workshops in Ziga and Somyaga, on July 5th & 16th	Industry - Civil society - Policy makers	81	Burkina Faso
30	Oral presentation to a scientific event	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	Dégradation des sols: Quel avenir pour les petits producteurs d'Afrique Subsaharienne dans un contexte de changement climatique	19/09/2011	Cotonou, Benin	Scientific community (higher education, Research) - Civil society - Policy makers	200	Sahel and soudanian zones
31	Oral presentation to a scientific event	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	Rehabilitation of degraded land by using Soil and Water Conservation in the North western part of Burkina Faso	09/12/2011	Florida, USA	Scientific community (higher education, Research) - Civil society - Policy makers	50	about 15
32	Exhibitions	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	Field visits to show existing and potential water harvesting Burkina Faso	10/10/2012	2 field visits in Ziga and Somyaga, on 5/9 and 10/10	Industry - Civil society - Policy makers	176	Burkina Faso
33	Oral presentation to a scientific event	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	Technologies de gestion de leau et des sols pour ladaptation aux changements climatiques	18/12/2012	Ouahigouya, Burkina Faso	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	150	multiple countries represented
34	Oral presentation to a	INSTITUT DE L'ENVIRONNEMENT ET DE	Effects of microdosing and soil and water conservation techniques on securing crop yields in the north western Burkina Faso	15/01/2013	Washington, USA	Scientific community (higher education, Research) - Civil society - Policy makers	120	multiple countries

Nº	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
	scientific event	RECHERCHES AGRICOLES						
35	Flyers	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	Tehncial manual on water harvesting technologies	30/09/2015	Burkina Faso	Industry	500	Manual for farmers, 500 copies made
36	TV clips	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	Réalisation démission sur les technologies dadaptation aux changements climatiques (Radio, Voix du Paysan)	30/09/2014	Ouahigouya, Burkina Faso	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	1000	Burkina Faso. Radio broadcast (not in list dissem types)
37	Videos	INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES	Video sur les experimentations WAHARA	30/09/2014	Ouahigouya, Somyaga, Ziga	Scientific community (higher education, Research) - Industry - Civil society - Policy makers	1000	Burkina Faso
38	Films	METAMETA RESEARCH B.V.	Video on WHT and experiments on WAHARA study site	16/07/2015	Ouahigouya, Somyaga, Ziga	Scientific community (higher education, Research) - Industry - Civil society - Policy makers - Medias	1000	publicly available anywhere
39	Articles published in the popular press	MEKELLE UNIVERSITY	A watershed evolving	30/09/2015	published in 'Farming Matters', issue sept 2015, p 34-36	Scientific community (higher education, Research) - Industry - Civil society - Policy makers	1000000	Farming Matters has 1M readers in 172 countries
40	Organisation of Workshops	MEKELLE UNIVERSITY	First stakeholder workshop on potential WH in the Ethiopian study site	28/01/2012	Wukro, Tigray, Ethiopia	Industry - Civil society - Policy makers	65	Ethiopia
41	Organisation of Workshops	MEKELLE UNIVERSITY	Second stakeholder workshop on WHT selection	15/12/2012	Wukro, Tigray, Ethiopia	Industry - Civil society - Policy makers	63	Ethiopia
42	Organisation of Workshops	MEKELLE UNIVERSITY	Participatory evaluation of the implemented WHT (including field work)	13/10/2013	Wukro, Tigray and Gule watershed, Tigray	Industry - Civil society - Policy makers	47	Ethiopia



Nº	Type of activities	Main leader	Title	Date	Place	Type of audience	Size of audience	Countries addressed
43	Oral presentation to a wider public	MEKELLE UNIVERSITY	Ethiopia success Stories in FP7, the case of WAHARA Project	05/12/2013	IST-Africa Horizon 2020 Workshop, Addis Ababa, Ghion Hotel	Scientific community (higher education, Research) - Civil society - Policy makers	50	Ethiopia
44	Oral presentation to a wider public	MEKELLE UNIVERSITY	Experience: WH options including bench terrace development	10/01/2014	National Forum on SLM in Ethiopia, Addis Ababa, (MoARD), Ethiopia	Scientific community (higher education, Research) - Civil society - Policy makers	75	Ethiopia
45	Oral presentation to a scientific event	MEKELLE UNIVERSITY	Presentation: objectives, activities and results of WAHARA	20/03/2014	Mekelle, Ethiopia	Scientific community (higher education, Research) - Civil society - Policy makers	150	Ethiopia
46	Oral presentation to a scientific event	MEKELLE UNIVERSITY	objectives, activities and results of WAHARA	15/09/2015	Research and Development Forum in Tigray, Ethiopia, Mekelle	Scientific community (higher education, Research) - Civil society - Policy makers	45	Ethiopia
47	Oral presentation to a wider public	MEKELLE UNIVERSITY	objectives, activities and results of WAHARA	14/10/2015	EU Horizon 2020 information seminar, Addis Ababa	Scientific community (higher education, Research) - Civil society - Policy makers	65	Ethiopia
48	Oral presentation to a wider public	MEKELLE UNIVERSITY	addressing effects of droughts through proper WH; the case of WAHARA project site in Ethiopia	10/01/2016	Forum on evaluating effects and solutions of drought in Ethiopia, Addis Ababa	Scientific community (higher education, Research) - Civil society - Policy makers	120	Ethiopia
49	Flyers	AGROTECHNOLOGY CONSULT AFRICA BV	Dent scarificateur modèle Kapandula, Spécifications	30/11/2015	Lusaka, it is a 9 page document with technical drawings on how to produce the Kapandula	Scientific community (higher education, Research) - Industry	1000	Burkina Faso, Ethiopia, Zambia

## Annex 5: Covers of WAHARA DVDs

