

MINUTES OF THE PLENARY MEETING HELD IN LEEDS, UNITED KINGDOM

MAY 21-23, 2014

Authors: Erik van den Elsen, Rudi Hessel and Luuk Fleskens



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Meeting notes WAHARA meeting Leeds

Minutes by:
Erik van den Elsen, Rudi Hessel and Luuk Fleskens

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WAHARA Action points LEEDS meeting, May 2014

No	What	Who	When & Remarks
1	Share D 1.1 – 1.4 on the WAHARA FTP site or dropbox.	Alterra	June 30
2	Scientific paper based on socio-economic survey on different SS (who?, when? -> discuss this on Friday	Alterra	Replaced by point 18
3	WP1 Database to be shared.	IRA	See point 17 too
4	Send questions to Mohamed	Alterra	June 10
5	WOCAT questionnaires need to be put online after processing comments from WOCAT secretariat.	ALTERRA, Burkina Ethiopia and Zambia partners (additions)	June 30
6	Provide information on modifications to WP3	SS	Before next monitoring season
7	Process suggestions regarding modelling PESERA	WP4	31 July
8	Check what task 4 of WP5 is exactly (testing or evaluation with stakeholders)	Alterra	Done
9	Decide about additional points of Piet Stevens during his presentation and decide on whether or not to incorporate them into the project and where.	Piet and Alterra	31 August
10	Investigate possibility for follow up of cooperation or exchange of outcome WHATER.	Alterra	31 July
11	Discuss use of Quick Scan tool in WP5	Piet, UNIVLEEDS	May 23
12	Look at info on drivers in WP1 products	Alterra	Done
13	Provide detailed planning breakdown of Del4.5/5.3/5.4/6.4/6.5 to Rudi	WP4-6 leaders	June 5
14	Think about plans for end of project meeting	Alterra	Oct 31
15	All partners to inform WP leader and RH about any delays	All	As and when it occurs
16	Look into sharing of information among partners.	Alterra	June 30
17	Discuss the status and best format for	Alterra - Rudi	July 15 (as 16

	sharing access to spatial database WP1 with Mohammed Ouessar		is needed first)
18	Provide current ideas for papers to Alterra	All	June 15
19	Request M36 interim progress reports	Alterra - Rudi	June 10
20	Provide M36 progress reports	All partners	June 20
21	INERA volunteers to host the next meeting, we will be sure if this is possible after November 2014	INERA / Alterra	Decide in Nov 2014
22	Provide a list of suitable journals	Alterra	June 30
23	Look at financial implications conditional payment for study sites which require funds to continue work	Alterra - Rudi	Done
24	Use new e-mail address of Kaushali Dave: dave_kaushali@hotmail.com	SS and All	From June 1st
25	Complete digital format WP6 information sheet if not handed in during the meeting in Leeds	Study sites	June 10

Present at the meeting:

Brian Irvine (LEEDS), Luuk Fleskens (WU), Dereje Assefa (MU), Mike Kirkby (LEEDS), Erik van den Elsen (ALTERRA), Silenga Wamunyima (GART), Kaushali Dave (LEEDS), Kifle Woldearegay (MU), Sarah Lebel (LEEDS), Piet Stevens (ACA), Marketa Hanzlickova (MetaMeta), Simon Chevalking (MetaMeta), Hamado Samadogo (INERA), Rudi Hessel (ALTERRA).

Wednesday May 21st

09:05 Introduction of participants

09:10 Introduction by Rudi

Rudi gives a short introduction and tells some general characteristics of the WAHARA project¹.

09:20 Presentation of **WP1**, given by Rudi Hessel (Mohamed Ouessar has not been able to come to the meeting).

- **WP1:** 'Potential for water harvesting in an array of settings in rain fed Africa'.
- The farm household survey has been completed by all partners but not sent to WP1 by partner Zambia yet.
- Deliverables **1.1 – 1.4** have been completed. These Deliverables will be shared on the WAHARA FTP site / DropBox (*action 1: Alterra*).
- The Agro-economic survey has been performed by the partners Tunisia, Rudi shows the corresponding presentation made by Mohammed.

¹ All presentations are available on the Wahara website

Action: Scientific paper based on socio-economic survey on different SS (*action 2*)

Action: Database to be shared (*action 3: IRA*).

- Rudi is showing the results from the Agro-Economic survey held by Tunisian partner.
- Remark Kifle: in most of the cases, the results from the survey in Ethiopia are opposite to the results found in Tunisia, e.g. regarding attitude to government.

Questions to Mohamed Ouessar

Q1 : What proportion of households make use of WH techniques?

Q2: Is there a need to innovate certain WH policies since people are not satisfied with government actions as can be seen from the survey?

Q3: what does NRM institution mean/do? What is the reason for the low participation on the survey?

Alterra will send these questions to IRA (*action 4*).

09:40 Presentation of **WP2** (Hamado Sawadogo)

- **Task 2.1** (standard format for WHT) and **Task 2.2** (compilation of promising WHT) have been performed.
- **Task 2.3** (design selection methodology) has been done during the Wageningen meeting.
- WOCAT documentation description task: completed in 2013, but we received some comments for Burkina Ethiopia and Zambia (from WOCAT secretariat) these need to be processed (see presentation Hamado for details, *action 5*). Next, the documents need to be put online on the WOCAT website.
- Choice validation for the choice experiment should be finished in month 22. This task will be finalized after the rainy season by Hamado.
- Remaining deliverables: **Del. 2.5** (stakeholder choice validation).

09:50 presentation for **WP2** by Kaushali Dave about the choice experiment (about WHT alternatives).

- The process of design, data collection and analysis has been completed for Tunisia only. For the other SS, the data collection is ongoing, analysis will follow.
- For most of the farmers in Tunisia, the criterion of crop failure is most important, also the crop yield factor plays an important role, the factor of cost for implementation and maintenance is seen as less important or not important.
- There is some discussion about the method of analysis of the data coming from Tunisia.
- There is a difference among different areas in the same country, also the choice for the alternative option differs from region to region.
- Data obtained with the CE can be combined with data from socio-economic survey of WP1, and can serve as input for modelling in WP4.
- It is not clear (yet) why people from a certain region (upstream, midstream, downstream) make specific choices within the experiment.

10:10 presentation for **WP3** by Kifle about WP3 progress.

- Kifle explains about the objectives of WP3. Activities carried out during the last period;
 - 1) Participatory monitoring protocols: done by all SS.
 - 2) Facilitation and documentation of adaptation design of selected WH technologies: done by all SS, to be presented by SS.
 - 3) Award competition for the best documentation: 2 SS have entered the competition (BF and Ethiopia).
 - 4) Participatory monitoring: ongoing by all SS and to be presented by each SS.
- Kifle gives an overview of different WHT adapted by SS.

Next activities:

- 1) Monitoring and design modifications,
- 2) More communication and data sharing,
- 3) Data outputs: publications and reports.

Q: what is meant by design modifications? **A:** this is a joint action between scientist and stakeholders (farmers) after a joint evaluation with the farmers. Rudi: this is relevant for other SS as well. (*action 6*: SS to provide information on modifications).

10:25 presentation for **WP4** by Luuk Fleskens about WP4 progress. (modelling and impact assessment of WHT).

Quick scan tool has been delivered, next was model development, until now. Now scenario analysis is coming up. Luuk explains about the PESERA-DESMICE as an assessment framework and integrating CE results in DESMICE.

Del.4.2 is slightly delayed (2M); possible delivery will be M42 instead of M40.

Del.4.3 is scheduled to start in M37 (March).

10:45 Coffee break

11:15 Presentation from **WP4** (Mike Kirkby) about modelling: extension of QuickSCAN and PESERA to estimate flood frequencies in large catchments.

- Mike talks about modifications and improvements in the development of PESERA.
- At the moment Leeds is working on incorporating runoff thresholds in catchments and their spatial distribution in the model. Quickflow duration curves will be used for routing.

Q: can the effect of WHT be simulated with the model?

A: probably not. Because the scales are not compatible, PESERA works in a km² - 100km² scale. WHT are much smaller.

- Remark Piet: still the incorporation of WHT structures into the model would be very important because then the model could also be applied for scenario analysis. The area served by (small) WHT structures can be very large. Mike acknowledges that and says this is also an important issue to work on (*action 7*).

Q: Can the model be run for the different sites in Wahara. Are input data available?

A: Yes, can use existing data. This gives generalized results. If there are local data these can be used instead.

Q: Rainfall data are discussed. Simon: Do you use rainfall intensity? **A:** Daily rainfall data. Rudi: Would you get different results if you did analysis separately for rainy season and dry season? **A:** Might be, it is possible to try this.

11:45 presentation by Piet Stevens about **progress of WP5:** 'Integration and scope for adapting WHT'. This WP has just started activities. Task for WP is finding for windows of opportunities for the tested WHT's. Output is potential impact, decisive factors for suitability, scope for up scaling, guidelines for adaptation. Links with other WPs: integrate outcome of WP1-WP4, produce input for WP6 (strategized dissemination of results). Tasks:

- 1) Integrated analysis of 4 sites,
- 2) Analysis of critical biophysical and socioeconomic conditions
- 3) Guidelines for adaptation
- 4) Stakeholder evaluations of adaptation guidelines

Piet shows a planning table for the 4 tasks, timeline. End = Feb.2016.

Q: task 4 is the running time enough for performing the evaluation by study sites? (4 months). **A** Rudi: it is just asking the opinion of stakeholders, not testing and evaluation. (*action 8* by Alterra to check this).

Activities for next 6 months:

- 1) Continue analysis of the available information of 4 study sites,
- 2) Obtain missing info
- 3) Produce draft reports T1 and T2 by Nov 2014

Points for (**additional**) discussion:

- 1) T1, what to report exactly?
- 2) What kind of info is missing and how to obtain it?
- 3) Use of external info: not only self-generated data, but other sources?
- 4) Can we perform a continent-wide quick scan with the QuickScan tool?
- 5) Task5: already mentioned.
- 6) There are many WHT but the adoption is lacking. What drives (or limits) adoption? Is important. See slide.
- 7) Review what we want to achieve; Ag. Production aspects, streamline vocabulary used, the 3 aspects that are always there: collection-storage-distribution, optimize water use once distributed.
- 8) WH for survival or to optimize ag. Production.

Remark Rudi: some things we are already working on, some need to be added to the project. We need to have a look at these points and need to take a decision whether or not to incorporate them into the project (and where). -> *Action point 9.*

12:25 presentation by Simon (MetaMeta) on **WP6 progress.**

Q: knowledge dissemination and adoption.

Internal Del.5 and **Del.6.1** completed. **Del.6.2** (Identify limitation options and enabling condition for knowledge transfer) is in progress. **Del.6.3**

Develop multi-level strategy for up scaling (future), **Del 6.4** (formulate policy approaches and disseminate these in cooperation with SS(future)).

Internal Del.5: 'Report on approaches and experiences of knowledge transfer': looking at knowledge transfer in the 4 SS countries.

Dissemination activities:

- Documenting the process of adaptation
- Wahara contest,
- Unused footage & interviews and from REST Ethiopia will be edited and put together.
- Documenting the Tal-ya trays (plastic trays from Israel) into WOCAT, Work on del.6.2 (options and enabling conditions) generate and distribute a questionnaire for that.

Q: is the sister project (WHATER) still connected and linked? **A:** exchange of film footage, but not more. There was a meeting in the beginning of WAHARA, and we agreed exchange of knowledge, but after Will Critchley left VU, this did not continue. Remark Hamado: contacted Will also, but no cooperation, since SS differ between the two projects. WHATER finishes this year. Action Alterra: investigate possibility for follow up of cooperation or exchange of outcome WHATER (*action 10*).

12:45: lunch until 14:00.

14:00 presentation by Rudi (for Mohammed) about **Tunisia SS**.

14:00 presentation by Hamado about **Burkina Faso SS**.

- Experiment 1: comparison of WHT (stone bunds and Zaï) to Magoye from Zambia. Parameters assessed: yield, plant regeneration, soil samples (no analysis yet).
- Conclusion: **yield** gives no significant difference between the 2 treatments only significant difference between treatments and control. Regeneration does give a significant difference between treatments and between treatments and control.
- Experiment 2: soil fertility management. This experiment compares WHT Zaï with control (no treatment). Result: significant differences.
- BF organized a field day visit for local stakeholders. They demonstrated the Tal-ya tray during the field day.

Q: Luuk: is the difference between mechanized Zai and Mangoye in labour costs? **A:** yes, there is a difference between the two; Magoye takes less time and there is a difference, mostly in regeneration of seeds.

Q: Piet: is the stone line in the WHT (Zaï) essential or can it be discarded? **A:** no, they should be combined; they optimize the harvesting of water.

14:50 presentation by Kifle about **Ethiopia SS**. 'Adaptation of WHT in Ethiopia: processes and statuses.

- Kifle tells about the stakeholder workshop they organized. They made a ranking in different WH technologies that were thought to be effective. Kifle selected 4 most promising WHT's.
- An overview is given about the status of the implementation and monitoring of WHT in Ethiopia.

Dereje: 3.4 soil improvement presentation. Objective is to determine the effect of ratio of organic and inorganic fertilizer in order to improve the soil

fertility and wheat production. More details and conclusions: see the presentation of Dereje.

15:40 tea break until **16:00**.

16:00 presentation by Silenga Wamunyima (GART) about progress of the Zambia study site.

- Monitoring of WHT did not start yet. 4 farmers implemented WHT, 20 more will be identified.
- Delays: no soil sampling yet, harvesting of '23/'24 crop is underway. Yield data could not yet be obtained.
- Data collected: too little replication, so not representative. Different management by different farmers.
- Choice experiment: information to implement design was provided, not yet implemented.
- Choice experiment delays: Limited funding for execution of survey and training, but this will be done in June/July 2014.
- Household survey: conducted and completed 1/2014. Analysis and reporting has not been done yet for two reasons: 1) GART was not sure who would do analysis; thought it would be WP1 leader, 2) late response from Mohamed after completion of the survey in 1/2014. Now IMCS (company) has been appointed to do the analysis and reporting.
- WOCAT questionnaires : online questionnaires have been revised and completed, but the GART organizational structure has not yet been entered into WOCAT online.
- Delay: technical implementation drawings (these were explained to Silenga).
- Problems: no proper handover from Arthur (predecessor of Silenga); questionnaire not properly adapted for Zambia; farmers did not understand the questionnaires and data on physical assets was not well captured.
- Solutions: R&D manager updated Silenga, Socio-economic and biophysical survey was executed without adaptation, next payment to start CE survey and training of enumerators.
- WOCAT: technical drawings will be updated using the examples in the WH book by CDE.

16:10: presentation by Sarah Lebel about climate change implications for WHT. She is working on timing of dry spells, results indicate that long dry spells are more likely to happen during grain filling (which is a crucial stage for yield). Some options are discussed: early planting, varieties with shorter growing period, store water.

Q: Mike: which climate scenarios do you work with?

A: the most extreme ones because nothing is being done yet.

16:40: Monitoring results and need for adaptation of measures – discussion based on 4 questions.

Q1 to what extent was the monitoring in Y1 successful?

Q2 Do monitoring results enable you to draw conclusions...

Q3 Are there indications that implemented WHT should be improved?

Q4 Do you plan to monitor the same WHT next year, or do you want to adapt them?

Rudi shows a file with some input from Tunisia. This file indicates that monitoring was not successful because the year was too dry; as a result there was no yield. Same WHT will be monitored again next season. **Q** for Mohamed: Can you explain what you want to achieve with the post event monitoring sheet, and who is providing the data for that sheet?

Hamado (Burkina Faso): difficulty trying 5 technologies at the same time. Hamado presented the results. More data needs to be collected about plant development. Hamado wants to do the same experiments with measurement of additional data (plant growth, etc.) the next year to get better insight. Conditions of the experiments need to be better controlled (equal soil type, etc.).

Kifle (Ethiopia): in the setup, we tried to set up the experiments in such a way that they can easily be up scaled. Final target is to find the best technologies that can also be up scaled.

Q: Luuk: sometimes farmers adapt by pumping groundwater. What is the change and how much water is being used by farmers for irrigation?

A: Kifle: we are measuring the amount of water and going to evaluate the outflow out of the catchment, we measure the rainfall and water levels in various places. We want to know the cost/benefit ratio of these new irrigation measures?

Q: Brian. A new technology was Benched Terrace system with cistern. Did not hear about the cisterns anymore? **A**: Kifle: In Ethiopia, a reservoir was built on the slope to feed the bench system, otherwise it won't work.

Q: Mike: do the benches also benefit from the hill runoff?

A: Kifle: yes, the benches are also filled by runoff water. Limiting factor for the Benched Terrace system is the cost for building the systems.

Silenga (Zambia): first year of the monitoring was a success. Most of the data is missing, since most of the data is underway. However, not all data could be collected due to late start. Monitoring during next season will be done better, with replicates.

Q2: No. data is underway.

Q3: (adaptation): No, not yet. No data is available yet.

Q4: same as last season

Q: Simon: what crops are being produced in Zambia: **A**: Silenga: maize.

17:15 Rudi introduces the WAHARA contest of WP3, after which Simon announces the winners. Prizes are handed over, and the winning documentation (film from Burkina Faso) is shown.

17:45 Closure.

Thursday May 22nd

WP5 discussion

Some of the points raised during the WP5 presentation on Wednesday were discussed further. Piet prepared the discussion by highlighting some issues.

Piet would like to discuss use of Quick scan tool with WP4; it turns out this can be done on Friday afternoon after the end of the meeting (*action 11*)

Piet: can a choice experiment be used in task 5.4?

Luuk: that would be very time-consuming. Better to try something like that in a workshop

Piet: Markets are important, should this be investigated at the workshop?

Rudi: agrees that markets are important, but thinks that the aim of the workshop is different, namely to evaluate draft guidelines for adaptation. Aim should be maintained, although different subjects could be added.

Luuk: Is WP5 going to scale up?

Rudi: yes

Kifle: it is the next phase in upscaling, builds on the other WPs. Awareness is important too

Mike: there are existing studies on markets

Kaushali: might be data in socio-economic survey too?

Kifle: Yes, is in there.

Kifle: Keep in mind that markets can develop quickly. For example, a few years back there was no market for pumps in Ethiopia, but now everybody has them.

Piet: Government investment could also create markets

Luuk: Population growth is important too

Piet: it also results in more demand. Need to look at agri-input too

Dereje: look not only at farming system, but also at institutional system

Mike: the supply of seed is linked to risk – if the crop fails there are no seeds.

With WHT risk of failure is smaller

Piet: Both seeds and finances can be a problem

Simon: Is developing a project in Ethiopia with big coffee traders. These are willing to invest. Agricultural productivity is important.

Piet: we should sell WHT not only to farmers, but to all people

Kifle: In Ethiopia, food security was the main focus before. Now there is also a focus on areas with high potential to generate surplus

Dereje: GIZ is doing that for market purposes

Luuk: The Malawi fertilizer scheme is also relevant, also because of the problems it created. Improved varieties are only good if there is sufficient water

Mike: what should be the upscaling focus? Maximise production in high potential areas, or focus on marginal areas?

Piet: High potential areas within farm

Kifle: also marginal land

Rudi: Different scales. High potential land often owned by other people than marginal land; therefore focus on high potential land does not help these people. Within a farm it might make sense to focus on the best land.

Piet: can we use model scenarios for marginal and high potential land?

Dereje: we need a definition of marginal; is that only about water, or does it include more?

Mike: we can include the climatic part easily in the model, the rest is more difficult

Luuk: Check IFDC, they might have suitable models for water and soil fertility. IFPRI might also have useful data

Kifle: Use of models is a good idea. Make a map of which WHT could be implemented where. For example: where could check dams be built?

Rudi: That is relevant for WP5

Excursion

An excursion is held to Yorkshire Dales, where participants learn about issues related to water, such as lead mining up to the 1880's. The current system of reservoirs and conduits that is used for water supply of e.g. Bradford is also explained. Even in this area water supply during droughts is a concern.

Friday May 23rd

Experiences and Governance of upscaling (WP6), Markéta Hanzličková

Action: return questionnaires distributed on Wednesday (*action 25*)

2 case studies from India to illustrate approach for spreading knowledge. digitalGREEN got famous, also outside India

Questions

Piet: 3 levels, but not international. Not considered? A: highest level can include that. Piet: governments link to each other.

Simon: hopes it shows in questionnaire too

Piet: cases showed how to motivate larger groups, trust building. Is important. Individuals cannot move on if community does not allow it. Are pulled back by others.

Marketa: initially devoted because of religion, later on also by the results that were obtained.

Mike: Do we need to fill the questionnaire also for UK?

Marketa: No, only for the 4 study countries, but if can fill in for these go ahead.

Hamado: training at which level? Is it farm field schools?

Marketa: are more from governments, but also from farmers. Part of extension, has to come from both sides

Kifle: good experience with farmer training centres in Ethiopia. Mainly done by Government, is important. Help to spread knowledge, including about some technologies in Wahara

Simon: please fill that info in the questionnaire

Scenarios for modelling (WP4), Luuk

Look at which scenarios need in Wahara, important WP4, 5, for scale sites & continental.

Where are the WP1 drivers mentioned in task 4.5? Alterra to check this (*action 12*).

WP5.2 similar wording. Combine quick scan with rough socio-economic model? Need to think about what model results (pixels) mean for households; is not straightforward.

Rudi: distance to road also relevant for inputs to implement WHT?

Piet: expects that proximity to road is important

Food and water security: scenarios for different types farms?

Erik: What is the difference between climate variability and climate change?

Luuk: variability occurs, need take different years for different conditions.

Change is for projecting ahead. Erik: after selecting certain technology? Luuk: yes, compare different technologies

Piet: what is the problem with food & water security?

Luuk: should be critical to what we present, is not just crop production. Explain in doc what we mean by that.

Dereje: selection process of WHT, list criteria used. One of these is crop yield, but there are also others. Can combine some. Should not concentrate on 1 or 2, but combine under umbrella issue. Assessed e.g in WOCAT, also quantitative.

Hamado: use scenarios for Burkina. For people who use and not use WHT. Most people live upstream. Also consider change of crop, e.g. as result of mining.

Farmers now prefer commercial crops, not staples. This is because the mining resulted in better markets.

Piet: how much can we contribute to food security?

Rudi: We need to focus on issues to do with water harvesting, less on other factors that influence food security too.

Dereje: before/after scenarios?

Luuk: yes

Kifle: How far can we enhance food security? What is maximum limit by investing on a certain piece of land, what would the production then be? Results encouraging, can grow 3 times as much as is done now. Important to model that.

Luuk: similar idea. Current system do not see much effect. Could look at maximum water buffering capacity. Look at which part of that is used productively. This is also a way of looking at food security.

Luuk: WAHARA scenarios could be based on DESIRE scenarios, perhaps with less focus on policies?

Scope of WP5 within WAHARA, Rudi

Rudi presented details from the Description of Work to clarify the purpose and position of WP5 in the WAHARA project. In short it aims at 1) achieving integration across sites, and 2) integration across WP1-4.

Task 5.1 is concerned with specifying the implications of the project for:

- Agricultural production
- Food and water security
- Regional development

- Provision of ecosystem services (we still need to give this more thought)
- Trade-offs upstream/downstream

Task 5.2 involves linking the results from WP1 with the Quick-scan tool of WP4. In Task 5.3 the first intention is to make generic guidelines for adaptation of WHT to local conditions ('how to go about adaptation?'), but there seems to be a need to develop guidelines for adaptation of specific WHT too; this could be done by study sites with input from WP3 and WOCAT QT questionnaires. Task 5.4 specifically suggests the use of stakeholder workshops to evaluate guidelines. It seems most logical to do this at the study site level, by evaluating the guidelines developed by researchers with stakeholders.

In summary, WP5 is about:

- which WHT are suitable where? This question can be answered by linking the analyses done in WP1 with quick-scan tool model application. It might be good to classify conditions in 2-3 classes, e.g. optimal, suitable and hardly suitable.
- How to select WHT? This question was basically addressed in WP2. Just to be copied?
Q Piet: Perhaps including information about the reasons why.
- How to adapt selected WHT? This will mainly be based on WP3 experiments. Question is whether this can be made more specific, e.g. provide information on how to adapt zai in drier than optimal conditions. This should be done for some key conditions, both biophysical and socio-economic.
Q Luuk: these key-conditions could include farming systems (arable, livestock, mixed) and resource availability

Planning, with emphasis on M37-54, Rudi

Rudi presented the current state of progress and points of attention for forward planning. He stressed the importance of doing everything possible to meet deadlines as delays affect other deliverables as well, and to communicate any difficulties in meeting deadlines at an early stage to be able to plan ahead and minimize impacts (*action 15*). With less than 2 years remaining, the flexibility in deadlines is decreasing.

The current state of progress shows some issues with regard to parts of WP1 (which should have been finalized 1.5 years ago) and WP2 (which should have finalized a couple of months ago), while WP3 and 4 are more or less on track and WP5 is starting. Alterra will discuss the status of the spatial database with IRA (*action 17*).

It is important to review the existing planning and provide detailed plans for deliverables for which such a planning breakdown was not yet made (for Del4.5, 5.3, 5.4, 6.4 and 6.5) see *Action Point 13*. The following questions need to be reviewed for ongoing deliverables and specified for the additional ones mentioned above:

- When will deliverables, milestones be achieved?
- Which activities are needed for that? Be as concrete as possible! E.g. which data to be collected? Which methods for interpreting/analysing data?
- Who will do these activities?

- Who is responsible?
- Deadlines for these activities?

Questions

Kifle: WP3 mentions milestone end monitoring in Month 51 (May 2015) – should this really be the end of field activities? Rudi: no, continuing monitoring is encouraged, but need to draw a line for providing input for deliverable reporting.

Piet: Not all information collected by the project is on the website – how to obtain this? Rudi: ask me as coordinator first; and if not clear we may ask others as well. FTP facility has been poorly used, perhaps as it is technically complex.

Brian: how can we make data transfer effective? Alterra will look into this (*action 16*)

Piet: what are the plans for the end of project meeting? Any ideas for a workshop and inviting external people? Rudi: not given thought yet (*action 14*).

Management issues, Rudi

Rudi presented a number of issues concerning management.

Management: 1) a contract amendment is being processed that is necessary as Coen moved from Alterra to WU. Rudi to become coordinator as a result. 2) agreement to be reached at this meeting on data sharing and management plan. This was discussed at the previous plenary meeting and document circulated for discussion and approval during this meeting. Approval was granted. Main elements of the document:

- Inform everybody about writing plan at early stage
- Data providers should be offered co-authorship
- From co-authors active contribution is expected
- If first author and possible co-authors cannot reach agreement on co-authorship, project coordinator will decide
- Interests of PhD students should be protected

Dissemination and use of information: Key points: 1) Need to provide a repository of information, preferably open access; 2) The project envisages three levels of scientific output: i) study site level; ii) WP level; iii) project level.

Provide suggestions now, or by email to Rudi/Erik by 15 June (*Action point 18*).

FP7 Africa Call Cross-cluster collaboration: A film was made, on the initiative of EC. WAHARA was asked to collaborate and contributed footage from Tunisia. This was in the end not used, but Rudi was interviewed and involved in discussions, and included as an acknowledgement. The film was shown and distributed to all those interested.

Finance: Rudi recapitulated the main information about financial management, including the payment conditions that were raised for transferring interim payments to study site partners due to delays that had been occurring. For GART, conditions extended to the pre-financing payments. GART is meanwhile showing great improvement since Silenga was hired.

Reporting: 1) The next EU-reporting is due after month 48 (covering M30-48). A request for providing a brief interim progress report which was due M36 will still be requested by Rudi (*action 19/20*). 2) In February 2014 the EU issued a new reporting guideline called: 'Streamlined and simplified processing of FP7 periodic reports – Single Submission and Suspension'. The most important

implications are that all reports need to be submitted as a single package. If no Form-C is included, it must be submitted the next period and no payment can take place. For further details – see presentation or the guidelines themselves. 3) The next EU reporting is due 28 February 2015. 4) A panel review was planned but no information has been received about this.

Next meeting: The last meeting should be held by February 2016, so the next meeting should fall somewhere in the period January-May 2015. Where will this be, given that we aim to visit all study sites? Hamado: offer to host the meeting in Burkina Faso (*action 21*). Confirmation is to follow in November 2014 to allow monitoring developments in the security situation. The best month would be June 2014. Kifle: back-up plan could be Ethiopia.

Questions

Mike: Is open access required, and how to budget this? Rudi: preferably open access, but no specific funds available. 'Green' standard journals could be suitable alternative as they allow repository (although often not within the required [FP7] period of 6 months).

Mike: are there any specific journals to target preferentially? Alterra to provide a list of suitable journals (*action 22*).

Kifle: how can we get coordinated outputs for increased impact? Rudi: in previous projects (DESIRE) attempt to produce special journal issues. However, lot of effort and only limited promised outputs materialized. Not keen to follow this path.

Kaushali: What about a book? Rudi: Perhaps a good integrated overview article with references to where to find all other outputs from the project.

Simon: Not just scientific output relevant – what products can we come up with for other audiences (task WP6).

Kifle: Idea about experimentation with dimensions of bench terraces for upscaling could be suitable for publication, perhaps integrating experiences from other study sites?

Kaushali: Envisaged are 1 or 2 papers about the choice experiment

Mike: important to think about this: ideas lead to collaboration

Mike: what happened to discussions about joint outputs with WHaTeR project?

Rudi: contact has watered down after Will Critchley retired from VU. Luuk: As the WHaTeR project was 3-4 years, we could make use of the outputs from it as background materials to build on.

Mike: Worth inquiring whether datasets are also available

Luuk: Perhaps an idea to suggest a special issue of overview papers of all FP7

Africa Cluster projects? Piet: Did the EU provide budget for cross-cluster collaboration? Rudi: No. Concerted publication effort can therefore not really be expected.

Simon: Are deliverables from the other projects available? They could be relevant for WP5/6. Rudi: yes, from respective project websites.

Hamado: What about ideas for continuation of research from WAHARA? Any ideas for a WAHARA2? Rudi: in principle no; it is very unlikely that a future call will fit the same consortium, but ideas for follow up activities can be shared and taken forward with the most relevant partners.

Burkina Faso and Zambia expressed concern of a catch-22 situation where funds are required for continuation of activities, whereas payment of funds was made conditional upon completion of the same activities. Rudi: will look into this (*action 23*).

Kaushali: Practical issue: will be moving back to India; please use dave_kaushali@hotmail.com to contact her from now on (*action 24*).

Simon: Practical issue: study sites to hand in WP6 information sheets (*action 25*). Will also send by e-mail for alternative method of completion and delivery. Also encourages study sites to share pictures of ongoing research.

Closure

Rudi thanks University of Leeds for hosting the meeting, and then closes the meeting.