FINAL EVALUATION

Empowerment and Local Action

WECF MFS1 Programme

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Abbreviations:

AWHHE	Armenian Women for Health and a Healthy Environment
ASDP Nau	Agency for the Support of Development Processes Nau
BIOM	Ecological Movement BIOM
BMA	German Federal Environmental Agency
BMU	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
BoT	Board of Trustees
CAAW	Central Asian Alliance for Water
CDM	Clean Development Mechanism
CDWUU	Community Drinking Water Users Union
CEHAPE	Children Environmental and Health Plan Europe
CSD	Commission on Sustainable Development
COP15	the 15th Conference of Parties to the UNFCCC
CW	Constructed Wetlands
EECCA	Eastern Europe, Caucasus and Central Asia
ECE	(United Nations) Economic Commission for Europe
ELA	Empowerment and Local Action
HFHK	Habitat for Humanity Kyrgyzstan
IAB	International Advisory Board
JMP	Joint Monitoring Programme
MFS	Co-Financing System (Medefinancieringsstelsel)
KAWS	Kyrgyzstan Alliances for Water and Sanitation
MDG1	Millennium Development Goal 1 (Eradicating poverty)
MDG3	Millennium Development Goal 3 (Equality between men and women)
MDG4	Millennium Development Goal 4 (Child Health)
MDG7	Millennium Development Goal 7 (Environmental Sustainability)
PHAEST	Participatory Hygiene and Eco Sanitation Transformation
PHAST	Participatory Hygiene and Sanitation Transformation
POPs	Persistent Organic Pollutants
RCDA	Rural Communities Development Agency
SDC	Swiss Development Corporation
SES	Sanitary and Epidemiological Station
SuSanA	Sustainable Sanitation Alliance
TMF	Thematic Co-financing Programme (Thematische Medefinanciering)
ToNi	Toilet-Nitrate Finder (Map with info on school sanitation and water nitrate levels)
ToT	Training of Trainers
UDDT	Urine Diverting Dry Toilets
ULGU	Public Association "Ulgu"
UNECE	United Nations Economic Commission for Europe
UNEP	United Nation's Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
WECF	Women in Europe for a Common Future
WHO	World Health Organization
W&HP	Water & Health Protocol
WiSDOM	Women in Sustainable Development of Moldova
WSP	Water Safety Plan
WSS	Water Supply and Sanitation
YGN	Young Guards of Nature

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General

1. This report presents the findings of the final evaluation of WECF's MFS1 Programme "Empowerment and Local Action" (ELA) implemented from January 2008 to December 2010. The ELA Programme distinguished three strategies or sub-programmes: poverty elimination, capacity building and democracy strengthening. The poverty elimination component was to be achieved through activities in 4 key thematic areas: sanitation, drinking water, sustainable agriculture and renewable energy. The ELA programme was implemented through about 30 WECF local partners in 10 EECCA countries, including Afghanistan. In 2008 and 2009 the emphasis was on capacity building and implementation of demonstration units; in 2010 more focus was put on consolidation, monitoring and drawing lessons learned. Advocacy –both at national and international levels- formed an integral part of the ELA programme to allow the incorporation of local solutions into broader policies.

2. All partners reported annually about the outputs achieved because of the ELA support. The ELA Programme largely achieved its targeted outputs already by the end of 2009; ELA activities in 2010 focused on consolidation and monitoring. There were a few exceptions: in Kyrgyzstan another 99 ecological toilets were constructed (on a micro-finance base!) and in several countries the work on energy demonstrations continued, since these had only really started in 2009.

3. The draft MFS1 evaluation report –written in October-November 2010- covered only the output data achieved in 2008 and 2009. When finalizing this report in early 2011 output data for 2010 had also become available and these have been incorporated into this final version. Comparing the targets for outputs with the achievements (see Annex 4) learns that many targets have been considerably over-achieved, such as the number of people trained or informed on urine diverting dry toilets, the number of people who got access to safe water, the number of energy demonstrations and the number of publications and policy recommendations by partner organizations. WECF also organized more training events for the partners than foreseen and issued more publications. A few outputs were approximately achieved: number of toilets constructed and number of people whose drinking water quality is actively monitored. Output targets related to the number of trainers (trained by ToT) on Water, Agriculture and Energy were not achieved when applying ToT criteria set by WECF, even though many more people were actually trained.

4. WECF had started the collection of information on outcome indicators at the time this evaluation took place (autumn 2010); at the time of the finalization of this report (February-March 2011) the analysis of the collected outcome data was still on-going. (Unlike for the output data, outcome related data were not collected annually). Hence there was no clear information available yet on the extent that the outcome targets have been achieved. WECF will report on this in their 2010 annual report. During the evaluation the achievement of some output indicators could be estimated. It appeared that targets of some indicators were very likely to be achieved, whereas for other indicators the available information was insufficient to make such judgments. Some outcome indicators targets even appeared unlikely to be achieved by the end of ELA, which especially concerns the scale of the actual use of human excreta as fertilizer. A main reason for not achieving outcome targets is the factor time, with 3 years a (too) short period for achieving such structural changes.

5. The ELA programme aimed to achieve poverty reduction. At the time of the evaluation there was –mainly anecdotic- evidence that the programme indeed contributed to this in terms of better access to safe water and sanitation, some reduced absenteeism of school children -especially girls- and possibly also teachers, increase in agricultural production, some employment creation, and some benefits due to the use of solar equipment – solar collectors reduce costs for fuel and increase

comfort, solar fruit dryers are used for small businesses and contribute to food security. ELA's overall impact on poverty reduction is hard to quantify, except in terms of number of beneficiaries. Impact on health is still difficult to measure, but not unlikely.

Conclusions per programme / thematic area

6. The ELA Programme addressed four thematic areas: Sanitation, Water, Agriculture and Energy (Programme 1). In addition Capacity Building and Democracy building were addressed as Programme 2 and 3. Sustainability and Gender were cross-cutting issues.

7. The Sanitation component was the largest component: all partners were required to have such a component included and more than half of the direct expenditure of the partners was on sanitation. ELA's activities focused on demonstrations of ecological sanitation in the form of Urine Diverting Dry Toilets (UDDTs): 843 household toilets and 39 school toilets were constructed. In general there is more demand for such toilets, though constraints for replications were also observed: individual households do not have enough financial means or they even want to benefit from subsidies (as in the demonstrations); in case of schools the absence of a budget for replications is an important constraint. The large scale construction of about 100 UDDTs by KAWS on a micro-credit basis demonstrates that unsubsidized UDDT construction can be feasible. Introducing the use of "ecosan products" (i.e. composted faeces and urine) takes more time than the 3 years of the ELA Programme.

8. In the water component –next to implementing actual access to water for about 20,000 people- the Water Safety Programmes were seen as particularly successful and innovative. These programmes create awareness, are implemented in cooperation with schools and are being replicated.

9. The agricultural component –aiming to achieve more sustainable agriculture- was implemented by a limited number of partners. Main subcomponents were training on sustainable agriculture including the use of ecosan products in agriculture and some demonstrations. Considering that all partners had an eco-sanitation component, attention to the use of these products in agriculture is indeed imperative.

10. Energy was a rather new topic for WECF and its partners. The first trials or demonstrations on renewable energy (mainly solar) started only in 2009, but raised a lot of interest among the partners and in the communities were they are working, resulting in many more demonstrations by the end of 2010 (147) than were foreseen (10). Integrating energy and sanitation seems successful, e.g. provision of warm water for hand washing (or even showering) next to a UDDT toilet.

11. Capacity building of partners, and awareness raising and training of beneficiaries, citizens and other stakeholders proved crucial to the success of especially the technical components of the ELA Programme and the changes in attitudes which were required to adopt and properly use these solutions. The joint (further) development of technologies, training materials and other approaches, with inputs of the partners, WECF and –sometimes- other experts, resulted in partners now considering WECF –and the WECF network- as a knowledge organization.
12. As far as analyzed, the ELA Programme has been effective in advocacy in several of the ELA countries, especially at local level working with local authorities and/or at national level. In countries where ELA partners were relatively more successful in policy influencing, similar activities were already implemented through earlier (WECF) projects in the years preceding the ELA Programme.

13. The ELA Programme also contributed to achievements in international advocacy: either by (co) funding the participation of WECF and ELA partners in relevant international events, but even more by using lessons learned from ELA partners to underpin and add weight to the advocacy messages.

14. The ELA Programme's design well incorporated sustainability enhancing measures. Most important was the thorough approach to capacity building of partners and target groups, including development and dissemination of training materials and other practical instructions, tool kits, etc. Most partners do now have the capacity to continue similar interventions, without WECF support or only in case of specific problems. Changed attitudes of government authorities and/or other donors towards ELA's solutions will also contribute to sustainability, enhancing options for replications. Though WECF supported partners in submitting new funding proposals (several of which were successful) financial sustainability in terms of funding for the partners (and WECF) to continue follow-up of implemented demonstrations and further promotion of replications, may remain a critical factor for maintaining the achieved momentum and achieving a critical mass for larger scale implementations.

15. Gender remained a rather ambiguous subject in the ELA Programme. The ELA proposal paid attention to gender, the ELA Monitoring Protocol contained gender indicators, and at the start of ELA also the partners were requested to fill in a gender questionnaire. But in practice both partners and staff lacked sufficient skills (and time!) to consequently address the gender issues at stake. Gender was also seen mainly as women's issues only. Still the ELA Programme seems to have contributed to increased gender equality (MDG3), largely by trying to achieve gender balances in involving beneficiaries in training and public participation (e.g. in committees). Most technical solutions also address women's practical gender needs.

Replications

16. When comparing the outputs, expected outcomes and potential impact of ELA's demonstration projects with the corresponding inputs in terms of financial expenditure and staff time, the "costs" per demonstration are high. However, the essence of the ELA programme was not –only- to construct these demonstration units, but rather to develop capacity, adapt technical solutions and create options for replication, which the programme indeed managed to achieve, and hence, the ELA Programme can be considered as successful.

17. Thus the underlying justification of the ELA programme laid in its foreseen potential to generate replications of the technical solutions provided, through a combination of demonstrations and advocacy. The evaluation collected sufficient evidence that actual replications, especially of UUD toilets and some solar devices, have started to be implemented, either financed by other donors, or sometimes without any subsidies, though the latter usually at a very small scale, with exceptions in Kyrgyzstan, where UDDT replications are financed by micro-credit.

18. With the ELA Programme WECF and its partners gained good momentum regarding the introduction of new solutions in their countries. In several ELA countries the situation regarding stand alone replications –in particular of UDD toilets- seems nearing a tipping point, with interests growing but still challenges to be addressed. In order not to lose such momentum, continued work will be vital.

Implementing the ELA Programme

19. The overall ELA approach with a call for proposals and annual grants, the requirement to include a sanitation component and actual implementation mainly in 2008 and 2009, had its advantages and disadvantages. Thus the number of ELA partners became larger than originally foreseen with some partners dropping out after 2008 due to lack of capacities or interest, but others building up

capacities in new areas which beforehand they had not expected to be able to master. WECF is well aware of the strengths and (also) weaknesses of the followed approaches, and is using lessons learned in the new proposals.

20. The duration of the ELA Programme was three years, which is too short to start from scratch to introduce solutions and end up with replications. In most countries where (first) replications are actually being implemented –and in particular without donor support- similar activities had been implemented through other (WECF) projects in the years before the start of ELA. In several countries, the ELA programme has follow up projects, e.g. in Georgia (sanitation, water energy), Moldova (sanitation, energy), Ukraine (energy) and Armenia (energy), Kyrgyzstan (sanitation, energy) and Tadjikistan (Sanitation).

21. The monitoring of the outputs was largely well addressed by the development of monitoring ("registration") tables that allowed the aggregation of data and reflected the output indicators, and the subsequent collection of data, in addition to progress reports and field visits. Considering that for WECF this is the first programme working with about 30 partners, the combined monitoring approach was largely satisfactory, though some flaws in the monitoring system did emerge, partly already recognized by WECF. This applies especially to the absence of proper definitions and some insufficient checking. The monitoring of the outcomes is still hard to assess as these are currently being collected and analyzed. However, the monitoring of impacts and spin-off (i.e. replications not directly financed by ELA but using ELA's technology) did not (yet) receive adequate attention.

22. The project management approach of MFS1 appears to have considerably improved since the implementation of TMF, becoming better structured in various respects. Though this evaluation had its focus on the activities and results by the partners, and project management was not assessed in detail, it was certainly observed that also the flexible and committed attitude of WECF staff contributed significantly to the success of ELA.

WECF as a network

23. The fact that WECF is a (well-functioning) network is appreciated by all partners, and clearly provided an added value to the ELA Programme. Interactions between ELA partners were always actively promoted in several ways and partners clearly can identify the benefits of such a network. WECF's deliberate choice to have field based coordinators, Russian speaking staff and coordinators well able to provide technical backstopping was highly appreciated by all partners.

24. The ELA Programme confirmed the niche and strength of WECF and the WECF network in (further) developing locally adapted sustainable solutions, linking these with policy influencing and actually achieving a concrete added value of its network structure.

25. The recommendations of this evaluation are presented in detail at the end of this report. A main recommendation, however, is the importance to maintain momentum in the process of up-scaling demonstrations into replications, including some continued monitoring of the achievements of ELA. Without project funding this will not always be easy; maintaining contacts with all ELA partners through the WECF network –including through the INTERA list serve- is important for this.

1 Introduction

1.1 Background

This report presents the findings of the final evaluation of WECF's MFS1 Programme "Empowerment and Local Action" (ELA). This 3 year programme (2008-2010) aimed to achieve target 10 on water and sanitation of MDG7 and to develop best practices and demonstration centres in the area of renewable energy and sustainable agriculture in 10 countries of Eastern Europe, Caucasus and Central Asia (EECCA) in cooperation with about 30 local partner organisations.

Due to time and budget restrictions the scope of this evaluation remained rather concise. The main purpose of the evaluation was to assess the main lessons learned by reviewing the outputs, outcomes, sustainability, gender impact and added value of the 3 components of the ELA programme: direct poverty reduction, capacity building and democracy building. As stipulated in the Terms of Reference, the evaluation also focused on reviewing internal monitoring. Selected reports were reviewed and interviews with partners and staff conducted. The evaluation took place intermittently in September and October 2010. The evaluator used the opportunity of the WECF Open Space Conference in Katranka / Tatarbunary in Ukraine, held from 14 to 16 September and reuniting almost all ELA partners, to interview selected partners, to participate in discussions and to visit demonstration sites of a partner in Moldova and of the Ukrainian partner organizing the conference.

1.2 About WECF

Women in Europe for a Common Future (WECF) has its roots in the 1992 Earth Summit of Rio de Janeiro. WECF was officially registered in 1994 as a foundation in the Netherlands following an initiative of European women to work together on sustainable development. WECF is now an international network of over 100 women's, environmental and health organizations implementing projects in 40 countries and advocating globally for a healthy environment for all. WECF strives for balancing environment, health and economy, taking into account the needs and perspectives of men and women. Currently many of the members of the WECF network are from EECCA countries.

WECF works at five key issues:

1. Safe chemicals & adequate provision of health care for all;
2. Safe and sustainable energy & climate protection for all;
3. Safe food production & sustainable rural development for all;
4. Safe water and sustainable sanitation for all; and
5. Gender equity in sustainable development, environmental rights and public participation.

WECF implements projects with its partners which aim to develop and implement sustainable solutions to local problems in the areas of chemicals, water and sanitation, energy and food production. WECF also engages in policy recommendations and advocacy, which is often inspired by problems and solutions encountered at grass roots level and representing women's perspectives. Policy work is at national, European, UN and other international levels.

WECF cooperates with other (network) organizations and research institutes, such as the Sustainable Sanitation Alliance (SuSanA), the European Water Partnership and the Hamburg Technical University, and also with private companies such as Solar Partner Sued in Germany.

WECF holds office in Utrecht, the Netherlands, in Munich, Germany and in Annemasse, France and has about 40 part-time staff members. WECF has an international Board of Trustees (BoT), bearing the final responsibility for the strategic and financial management of the foundation. The International Advisory Board (IAB) represents WECF's member organisations. The IAB works in an advisory capacity on strategic

issues and organisational development. IAB members (currently 11) are elected by the members of WECF. The Board of Trustees maintains close connections with the IAB by mutual representation at each others meetings.

In recent years WECF's annual turn-over was about 3 million euro. Next to the Netherlands Ministry of Foreign Affairs, WECF's donors include the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), the German Federal Environmental Agency (BMA), European Commission (DG Environment and EuropeAid), the Netherlands Ministry of Housing, Spatial Development and the Environment (VROM), Fondation Ensemble (France) and the Stefan Batory Foundation (Poland). Natracare is an example of a private sector company supporting WECF activities.

1.3 WECF's MFS1 Programme

Between 2005 and 2007 WECF implemented its first programme financed by co-financing of the Netherlands Ministry of Foreign Affairs[1]. This was the "Tapping Resources" project financed by the Thematic Co-financing Programme (TMF Project No. 10628). Main activities were the implementation of demonstration projects and capacity building activities in Afghanistan, Armenia and Uzbekistan, as well as outreach and advocacy activities. WECF's MFS1 Programme, Empowerment and Local Action (ELA), was developed based on the lessons learned from this TMF project and through a participatory process of programme design with its MFS1 partners. The total MFS1 budget for the three years amounted to 4.9 M euro.

The overall objective of ELA MFS1 Programme was formulated as: *Build the capacity of poor local communities in rural areas, citizen's organisations, private sector, science and authorities to work in partnership to contribute to the sustainable implementation of MDG 7, 1, 3 and 4.*

The ELA Programme distinguishes three strategies or (sub) programmes:

1. Poverty Elimination Strategy, through 4 key thematic areas: sanitation, drinking water, sustainable agriculture and renewable energy.
2. Capacity Building, of citizens and of partner organisations.
3. Democracy strengthening, by creating awareness among citizens in the target countries and policy influencing at national and international levels.

The ELA Programme aimed to pay special attention to sustainability and gender issues. The MFS1 proposal envisaged to work with partners in 10 EECCA countries.

The ELA Monitoring Protocol, edited version 22.08.2008, provides an overview of the expected result areas per strategy at output and outcome level, including indicators, level of aspiration and means of verification. As main result areas were foreseen:

- Improved quality of living and health conditions, reduced groundwater pollution and improved harvests, through improved sanitation and hygienic conditions and reuse of nutrients in agriculture;
- Improved quality of living and health conditions, and communities acting to improve their drinking water quality, through active monitoring of drinking water and improving drinking water supply and quality;
- The principles of sustainable agriculture internalized by the participating population, through demonstrations of sustainable farming;
- Improved quality of living and health conditions from improved sustainable energy, through energy saving and use of renewable energy;

[1] Apart from WECF's Matra projects financed by this Ministry

- Citizens' awareness increased and the implementing capacity of relevant approaches and health measures increased, through increased capacity of the partners to implement projects and educational materials development and published;
- Population of project countries aware of programme approaches and national policies pay attentions to these approaches, through broad media coverage and lobby of politicians at regional, national and international level.

The Monitoring Protocol includes also indicators for gender and sustainability.

1.4 Partner selection

Before the development of the ELA programme WECF staff had already conducted several fact finding missions (2006) in the target regions to identify and meet potential partners for the ELA programme. A number of these potential partners had been already in contact with WECF before. After they participated in workshops on the intention of the ELA Programme, including a first training on ecological sanitation, interested partners were requested to submit project proposals to WECF. Considering the commitment of the ELA programme to contribute towards achieving of especially the sanitation target of MDG7, all partners were requested to include a sanitation component. The proposals were assessed by a broad team of WECF staff, each with a different expertise, and the final approval was discussed in a plenary meeting. By the end of 2007 32 partners from 10 countries had been selected to receive a grant to implement their ELA project. The countries were: Afghanistan, Armenia, Azerbaijan, Georgia, Kyrgyzstan, Kazakhstan, Moldova, Tajikistan, Ukraine and Uzbekistan. The individual partners are presented in Annex 1, together with some selected information on outputs and the annual grant amounts received.

The same process of submitting a proposal was repeated by the end of 2008 for 2009. For the second and/or third MFS1 year the number of partners receiving a grant was decreased because of two reasons:

1. Two partners became implementers of other WECF projects addressing the similar topics. In good coordination the decision was taken not to provide them with additional MFS1 funding, also from an efficiency point of view.
2. Four partners who had received a small grant in 2007, had not developed sufficient capacities in (one of) the four thematic areas of the ELA programme and sub-granting to them discontinued. With some of them another form of collaboration continued. In case of GEBMA and FCE, two small partner organisations from Georgia with a more scientific focus, the ELA programme hired them as experts to do research on urine pathogen contamination and water testing, which supported the work of the other Georgian ELA-partners.

Consequently the number of partners receiving sub-grants amounted to 27 in 2009 and 26 in 2010. With the main implementation of the demonstration projects in 2008 and 2009, 2010 was characterized by a focus on consolidation of the practical projects, further capacity building, monitoring and information sharing. Almost all partners that received a grant in 2009, also received one in 2010, though considerably smaller. In 2010 less (new) demonstration units were implemented, with as main exceptions the 99 toilets by KAWS and HFHK and 32 energy objects by 6 partners. This year was mainly used for completing any un-finished projects, monitoring to ensure the proper use and maintenance of the demonstration objects, advocacy by some partners and by WECF, and any other follow-up developments, including some further training and exchanges between partners.

Due to the special situation in Afghanistan, the concerned partner (Katachel) operates differently than the other ELA partners, which is discussed separately in Box 1. The partner from Uzbekistan continued to face restrictions, affecting the entire NGO sector in this country. This impacted the overall scale of

project implementation by this partner and prohibited any broad media work as well as policy influencing at national level.

Box 1. WECF's partner Katachel, Afghanistan

Katachel e.V. is a Germany based association, named after the village Katachel in the northern Afghan province of Kunduz. Since 1994 Katachel e.V. has been active in implementing aid projects in Katachel and neighbouring villages: construction of social infrastructure (schools, wells, roads and bridges) and provision of welfare to support the poorest people, in particular to female household heads and widows. In recent years Katachel e. V. also supported the construction of (UDD) toilets and initiated income generating projects. Katachel e.V. works through a local organisation with local staff.
There are two main reasons why WECF, like during the TMF project between 2005 and 2007, works through the German association instead of directly with the local organisation:

1. The local organisation does not have sufficient capacity to act as a WECF partner like the other ELA partners, for example, except for the implementation of practical actions much other project management expertise is lacking, including mastering of the English language;
2. Due to the (worsening) security situation in the Kunduz province and the related travel restrictions, it is impossible for WECF staff to visit the project area for monitoring. In contrast, the German president of Katachel e.V., who has a longstanding relationship with the population of the project area, is still able to visit the project area regularly, even now that the security situation restricts her mobility in the project area (her last visit was in September-October 2010).

Katachel e.V. used the ELA contributions of 2008 and 2009 for the construction of 102 UDD toilets and school toilets for one school. There was instruction on their use and maintenance; urine is applied in people's gardens, especially since a trial with apricots demonstrated a much better yield in the plot where urine was applied.
In 2010 the much smaller ELA grant was used for the construction of 11 bathrooms with showers and toilets for the poorest families, often consisting of 20 to 25 persons each (extended families). For these families the bathroom has now become the best room of the house (the rest is mud construction); in particular among the women there is huge demand for such showers with also privacy. According to the president of Katachel e.V. these activities led to a mentality and behavioural change regarding hygiene issues, with a spin-off towards awareness on other issues: more self-esteem, more awareness on family planning issues and more confidence in own decision-making.
Another spin-off of Katachel's emphasis on hygiene and environmental issues is the request of the mayor of Kunduz, who approached Katachel's president to discuss how to deal with solid waste management and waste water in a new urban expansion of 400 hectares. There are now ideas to link this mayor to an expert of Afghan background of the University of Braunschweig.
In 2010 Katachel e.V. faced a huge disappointment in their trust in their Afghan local manager when it was discovered that he had been keeping a shadow administration since the start. In particular real estate, supposed to be registered in the name of the Katachel association, was found to be actually registered in the personal name of this manager. Investigations by the Afghani criminal police followed and in May 2010 the Afghani authorities re-registered all the property back to the association Katachel. This case was also investigated by the German authorities, and after not finding any wrong-doings by the president of Katachel e.V., all charges were withdrawn in December 2010. WECF continues to support the work of Katachel.

1.5 Methodology

The consultant started to collect and review relevant documents, selected in consultation with the field coordinators and other WECF staff, see Annex 2. On this basis a checklist of issues was developed to use as a guide to interview partners.

From 14 to 16 September 2010 WECF organised an Open Space conference "From the Past into the Future" for the partners of the ELA programme and for other partners from the EECCA region. This was held in the village of Katranka, near Tatarbunary in Ukraine; ELA partner Vozrojdenie, based in Tatarbunary, was the local organizer of this conference. The consultant joined this conference to make use of the opportunity to find many ELA partners coming together. In consultation with the WECF

regional field coordinators a selection of partners had been made for interviewing. Some interviews took place during the conference's programme, others before and after plenary discussions. The day before the conference started a visit was brought to a project village of the Moldavian partner WiSDOM. On Friday 17 September also project sites of Vozrojdenie were visited. In total 14 partners were interviewed using a checklist of issues. In most interviews the majority of these issues could be discussed; some other interviews had to be limited due to time constraints.

On October 15, 2010, an interview by telephone was conducted with the German based partner working in Afghanistan. WECF staff members were also interviewed, mostly in the last week of October, by skype or by telephone. A list of persons who were interviewed and consulted can be found in Annex 3.

The total duration of the evaluation was limited to 15 working days, spread over a longer period of about two months. Due to the limited time and budget available for the evaluation vis-à-vis the complexity of the ELA programme, the same consultant (Kitty Bentvelsen of Femconsult) was contracted who also conducted the end evaluation of WECF's TMF programme, since she had already a background in WECF's area of work.

The draft evaluation report was submitted in November 2010. Feedback was received from several members of the ELA team; the report was also discussed with WECF in December 2010. At that time it was agreed that the evaluation report would be finalized after the 2010 output data had become available in order to include these recent data in the report. Hence, the output related data which were up to 2009 in the draft report, have been largely replaced with the data also including the 2010 outputs, unless otherwise indicated. At the time of finalizing this report (March 2011) the analysis and checking of the monitoring data collected on the outcome indicators, however, was not yet fully finalized and hence are not incorporated into this report. WECF will report on these outcome indicators in the ELA annual report for 2010.

1.6 Acknowledgement

The consultant would like to thank all persons she interviewed for their willingness to share information and for their openness to discuss achievements and constraints. Many thanks go to the partners who were interviewed, and who gave up free time for this; to WECF's field coordinators, who were an important source of information and who patiently explained many details of the ELA programme; and to all other WECF staff who were interviewed, especially considering their workload after they had spent much time in September-October contributing to the preparation of the MFS2 proposal.

1.7 This report

Chapter 2 of this report describes the activities and results of the ELA Programme, focusing on outputs and outcomes, also reviewing the indicators of the Monitoring Protocol. Chapter 2 is sub-divided in sections per thematic area and sub-programme, and also discusses sustainability and gender, for which separate outcome indicators had been included in the Monitoring Protocol. Chapter 3 is about the management of the project, but focusing on two aspects: monitoring and WECF as a network organisation. Chapter 4 provides summarizes the findings and provides recommendations for the future work of the WECF network. Chapter 5 provides the recommendations, based on lessons learned from the MFS1 ELA Programme. The main findings, conclusions and recommendation are summarized in the Executive Summary.

2 Achieved Outputs and Outcomes

This chapter will discuss the activities implemented by the MFS1 ELA Programme, focusing on the outputs and outcomes achieved. The Monitoring Protocol of 22.08.2008 presents output and outcome indicators and the corresponding level of aspiration. As far as possible actual achievements will be compared to the targets set in this protocol.

WECF annually monitored the **outputs** of the ELA programme (through the so-called "registration sheets") and presented them in the annual reports for 2008 until 2010. These tables are not repeated here, but some aggregated data are presented and commented upon. Annex 1 provides some examples of outputs per partner to facilitate the understanding of which themes have been addressed by each partner. Annex 4 compares the targets of the output indicators as set in the monitoring protocol and the corresponding achievements up till the end of 2010.

Structural information on **outcomes** was not yet available as at the time of writing and reviewing of this report (October 2010 and February 2011, respectively) as WECF and its partners were still collecting and processing such information. During the interviews with the partner organisations and WECF staff their perception of outcomes and (potential) impact was discussed. In many cases some evidence - quantitative, qualitative or anecdotic- of achievements was provided. The discussion on outcomes in this report is therefore based on these interviews rather than on monitoring data.

In the sections below the achievements are discussed per sub-programme and per thematic area. In practice the WECF partnership develops and implements its interventions often in an integrated way and specific activities can cover more than one theme or sub-programme. An example is the capacity building of the partners not only to achieve the goal of the capacity building sub-programme, but also to enable the successful implementation of the practical projects (sub-programme 1). Training on composting of also human excreta is a concrete example of an individual activity that is relevant for two thematic areas: sanitation and sustainable agriculture.

Most attention in this chapter is given to sanitation because all ELA partners implemented eco-sanitation interventions in both years (2008 and 2009), whereas activities related to the other three themes were implemented at a smaller scale and/or –in case of the demonstration projects on energy- mainly in 2009. This is also reflected by the division of the partners' expenditure per theme or strategic objective, see below table.

Table 1. Overview of MFS1 Partner expenses[2] per thematic area and per year

Thematic area/Sub-programme	**Partner expenses 2008 in Euro and percentages**	**Partner expenses 2009[3]**
Sanitation	577,987 (57.7 %)	563,105 (68.8 %)
Water	55,890 (5.6 %)	98,370 (12.0 %)
Agriculture	60,780 (6.1 %)	
Energy	41,190 (4.1 %)	53,113 (6.5%)
Health		45,894 (5.6 %)
Capacity Building	201,882 (20.2 %)	42,101 (5.1 %)
Democracy	55,731 (5.6 %)	15,431 (1.9 %)
Total	**1,001,103 (100 %)**	**818,014 (100 %)**

[2] This is the expenditure through the bank accounts of the partners and excludes the expenses directly paid by WECF, which cover, next to WECF staff expenses, also the capacity building of the partners, cost of publications, and expenses related to international advocacy, both for partners and WECF.

[3] In WECF's 2009 Annual Report the expenses of the partners were subdivided according to WECF's own strategic objectives which differ slightly from ELA's themes and strategies, as the former includes Health and the latter Agriculture as specific themes.

Moreover, the concept and technologies of eco-sanitation are relatively "revolutionary", especially for the beneficiaries, which also justifies more attention to the actual use of the dry toilets and the beneficiaries' satisfaction. However, this does not mean that solutions promoted by ELA for other thematic areas do not contain innovations.

2.1 Sanitation

The first pilots of UDD toilets by WECF and its partners were constructed from 2003 onwards. Through the ELA programme WECF continued to promote and replicate sustainable sanitation, in particular the concept of "ecological sanitation", closing the nutrient loop, see Box 2.

Box 2. Ecological sanitation

Ecological sanitation is based on the principle of the reuse of the human excreta in agriculture instead of considering it waste. In a dry urine-diverting toilet (UDDT), urine and faeces are collected separately and sanitised by storing the excreta for an extensive period, according to WHO guidelines. Hereafter the urine can be used as fertiliser and faeces as compost. Ecological sanitation does not require water for flushing or a sewage system and reduces the amount and the pollution of waste water and the need for synthetic fertilizers. Eco-sanitation is therefore an economically and environmentally sustainable solution. UDD toilets can be constructed adjacent or inside a building (house, school, etc.) instead of at a certain distance as is required for pit latrines due to their smell and pollution.

All ELA partners had a sanitation component in their projects. WECF made this compulsory in order to achieve a relatively robust output in terms of access to safe sanitation. In practice this meant that, next to partners already familiar with ecological sanitation (ecosan), other partners started implementing sanitation activities for the first time. Almost all were or became very motivated to apply the concept of eco-sanitation. Some partners were already looking for alternative solutions as they observed negative effects of water flush toilets in (rural) areas without central water supply and/or sewage systems. For example, a partner from Tajikistan reported that the flush toilets installed by UNICEF in schools did not work since no water supply was available. WiSDOM from Moldova was interested in eco-sanitation because privately constructed flush toilets in their project village caused problems due to the absence of a sewage system. After two years of ELA training and support for eco-sanitation implementation, it can be concluded that a few partner organisations –after all- did not achieve all required capacities[4] and/or focus to become sufficiently strong in eco-sanitation. Other ELA partners without a previous sanitation background, however, developed good expertise and commitment and became successful in this subject.

The ELA sanitation theme focused almost entirely on the introduction of UDD toilets in combination with hand washing facilities, grey water treatment[5], hygiene training and other awareness. The sections below describe the activities and achievements related to UDDTs. Since sustainable sanitation is more than UDDTs alone, other forms of sustainable –decentralized- sanitation also were presented during ELA training and some technical knowledge shared, but their implementation as demonstration units remained very limited. In total 4 constructed wetlands[6] for treating grey water were constructed (one still under construction in October 2010); not much information on their performance is available (yet). But several partners constructed simplified soil filters, which are simple filters allowing the infiltration of grey waste water into the soil. These have often been constructed next to hand washing facilities in

[4] Especially capacities related to community work (such as selection and proper training) and/or financial mechanisms.
[5] For the grey water treatment from hand washing basins simplified soul filters were recommended.
[6] A constructed wetland (CW) is a recognized waste water treatment plant for treating domestic or municipal waste water, consisting of a pre-sedimentation step, a filter bed (sealed from the underground) and a manhole allowing monitoring of the effluent. CWs can be constructed to treat grey water only (as in ELA) or both grey and black water (grey water is from kitchen and shower; black water also includes the sewage from toilets). CWs for grey water require a much smaller size per unit waste water than CWs for black water; the latter are also more complicated to construct and manage.

combination with the UDD toilets. Where showers were constructed (at a small scale only) also simplified soil filters were implemented to allow a proper discharge of the waste water. There was no structural monitoring of the performance of these simplified soil filters by WECF's sanitation coordinator. But the Georgia based field coordinator of WECF monitored their performance in Georgia and Moldova and found that overall the beneficiaries were happy with these filters; annual cleaning is needed.

Training and awareness raising

All interviewed persons –partners and staff alike- strongly agree that adequate training and awareness raising is crucial for the successful introduction of eco-sanitation and its sustainability. Three categories of training and awareness activities were implemented by the ELA partners:

1. training for prospective builders of UDD toilets (2238 persons, 49 % women[7]);
2. training of trainers[8] (ToT) on ecological sanitation (2247 persons, 56% women); and
3. information provision on health, hygiene, sanitation, proper toilet cleaning and maintenance and the reuse of urine (38,536 persons, 55% women).

WECF adopted the WHO tool "Participatory Hygiene and Sanitation Transformation" (PHAST) into one that is in line with eco-sanitation: Participatory Hygiene and Ecological Sanitation Transformation (PHAEST). This tool helps participants to analyse their hygiene behaviour, discuss safe and unsafe toilets and learn about pathogens in excreta. The use, cleaning and maintenance of UDD toilets are discussed in a participatory way. This PHAEST tool was especially successful in the Central Asian countries, but the above topics were included also in the training and awareness activities in the other countries. These training and awareness activities seem to have been well effective in the sense that they enabled the construction and (largely) proper use of UDD toilets, see next sections.

Construction of UDD toilets for households and its costs

Construction of UDD toilets started after initial training and awareness raising. An additional purpose of the toilets built with ELA subsidy was the further adoption of the UDDT technology to local conditions (e.g. using locally available materials) and for demonstration. All partners developed criteria for the selection of beneficiaries, which differed somewhat per partner. Common criteria were the commitment to use the UDD toilet as meant, including proper cleaning and using the "ecosan products" (urine and composted faeces) as fertilizer, the provision of some own (financial) contribution to the construction and the willingness to demonstrate their toilet to others. Some partners included poverty as a criterion for beneficiary selection, but others choose to also build toilets for (relatively) better off families, including those of local leaders, to avoid UDD toilets being seen as a solution just for the poor. Several partners gave preference to larger families, especially with several children, women and/or girls. Another common criterion was the absence of a proper existing toilet or the option to build conventional toilets (i.e. whether a central sewage system and/or central water supply system for flushing was absent). Some partners prioritized villages in areas where the construction of pit latrines is difficult, in particular in areas with a high groundwater table, which greatly increased the acceptance of the UDDT concept. The final selection of beneficiaries was usually done by a citizens' committee or otherwise with involvement of the local community.

Except for Afghanistan, almost all households selected as beneficiaries of UDD toilets already had a toilet, commonly a simple pit latrine. These pit latrines were characterised by its poor condition of the superstructure (windy, not rainproof and temperatures below zero in winter), bad smell, flies, and

[7] The percentages of women participants is based on data provided by the large majority of partners; a few partners only provided total numbers of participants without disaggregation by gender.

[8] WECF staff informed that consensus of which training can be defined as ToT was missing within the partnership; hence the monitoring information on ToT is based on the partners' own interpretation.

polluting the groundwater. In Ukraine some beneficiary families were selected as UDD recipients (though not under ELA) who already had a flush toilet inside their house which experienced water shortage and/or sewage problems, to demonstrate an alternative option.

Many partners signed a contract with the selected beneficiary family. The precise content of the contract varied per partner, but all dealt with the obligations and rights of the beneficiary. As a rule the contracts stipulate that the beneficiary actually had to build an UDD toilet and use the toilet and its "products" properly. Contracts often also describe what will happen if a toilet is not properly built or used, for example, returning received materials and/or repaying the received subsidies. In some cases the beneficiaries were required to remove the old pit latrine after the UDD toilet had been constructed.

The construction of the UDD toilets was by trained craftsmen and/or household members themselves, assisted by the concerned ELA partner. The special seat or slab, needed to separate urine and faeces, was generally manufactured by one of the partners in a country. Availability of these seats is a constraining factor for UDDT construction (and multiplication) as a special and costly mould is needed. However, some partners developed local designs to build urine diverting seats or slabs themselves with locally available materials. Almost all toilet facilities were provided with a separate additional urinal and, in areas with a Muslim population, also a bidet. Some partners made hand washing facilities inside the toilet room compulsory; others required the availability of hand washing facilities near the toilet.

Even though WECF and several partners had previous experience in the construction of UDD toilets, the ELA programme brought some new improvements, such as better insulation to avoid freezing of urine during cold winters, the local manufacturing of the urine diverting seats (either by ingenious own designs or in ceramic (Georgia)) and the successful inclusion of urinals as a standard. The search for the use of local materials, especially for the superstructures, also brought down the average construction costs in 2009 as compared to 2008. The combination with a solar collector, providing warm water for hand washing -and other purposes- is another achievement. Several partners also experienced with a mobile UDD toilet, such as Mountain Club Jabagly Manas (MCJM, Kyrgyzstan) and Vozrojdenie (Ukraine); the latter partner stationed this toilet last summer at the sea side to be used for tourists.

Over the 3 years (2008-2010) 850 household UDD toilets were constructed with ELA co-funding covering on average 76% of the direct costs. The remaining part was provided by the owners, often in the form of locally available construction materials. Labour was always contributed by the beneficiaries and not included in the cost calculations, except in case of the microcredit project by KAWS-HABITAT. The direct construction costs per toilet varied between 110 Euro (in Ukraine) and 1600 Euro (in Azerbaijan), with an average of 511 Euro, most toilets costing around 400 – 600 Euro. The 850 new UDD toilets benefit 6077 persons, half of whom are women or girls. 70 Household toilets were co-funded with 44% from Foundation Ensemble.

The average direct cost per user -paid by the project- amounts to 51,24 Euro. This excludes the costs for training, technical support and monitoring. These costs can be considered as relatively high when comparing them with standards set by the Joint Monitoring Programme (JMP), which include also the indirect costs. However, there are several arguments for justifying these higher construction and overhead costs:

- The costs of a standard UDD toilet are normally higher than for an improved pit-latrine due to the need for the vault system and urine containers.
- Another important factor is that once people of the EECCA countries invest in a new toilet, they want to have a nice-looking one and they spend extra (often own money) on good bricks, tiles and decoration.
- When compared to a flush toilet, including the costs for a sceptic tank and the regular disposal of its content or for sewerage and water treatment systems, UDDT's costs are lower.

- The ELA toilets are built in cold climates which require higher standards for the superstructure than are required for warmer climates in developing countries.
- The toilets are part of the development of an alternative toilet option in all target countries and therefore require more inputs related to demonstration, training and technical assistance. Several up-scaling examples (KAWS, CAAW) already proved that the construction of larger numbers of toilets becomes cheaper, especially in terms of material and overhead costs.
- The UDD toilets do not require a sewage system or sceptic tank as flush toilets do and thus no spending on emptying, maintaining and treatment. Nor do they pollute groundwater as pit latrines do, which prevents or reduces the expenditure on treating drinking water from nearby wells.

Use of the UDD toilets by households

All interviewed partners reported to regularly monitor the use of the constructed toilets. They observed that the large majority of the UDD toilets are properly used in the sense that urine and faeces are actually separated. In the few cases that this did not happen, the most common cause was the use of the toilet by visitors (e.g. in case of a wedding) who were not instructed on the proper use of the toilet. There are a few examples of toilets that were initially not used because the family considered the toilet as "too beautiful" and instead used it as a showpiece for visitors. The standard of cleaning, however, is not always satisfactory. A main reason is that the habit of toilet cleaning is often lacking among the beneficiaries as people hardly used to clean their pit latrines. However, practical training on proper cleaning and maintenance is part of the ecosan training for the beneficiaries. The partners also address this issue during their monitoring visits to beneficiary families. A partner representative stated to even have cleaned beneficiary toilets herself to demonstrate how a proper cleaning is done.

Two other sources providing information on the use of constructed UDD toilets by WECF partners are (1) a visiting report to Ukraine by WECF's sanitation coordinator (33 household toilets inspected) and (2) a database on the status of constructed households toilets (in October 2010 this database contained information on 58 UDDTs visited since July 2009; data on more toilets had been collected but still had to be entered). Both sources also include information on toilets funded by others than MFS1. The findings from these two sources include:

- About two-thirds of the (database) latrines had some technical problem, though mostly a minor one, such as lack of cover on the ventilation pipe, a negative slope of a urine pipe or lacking a water tight floor;
- Cleaning frequency mostly varied between daily to once a week and is mostly done by the women of the household;
- Almost all toilets are used and the users satisfied; but
- The use of UDD toilets in households that already have a flush toilet (6 of the 33 inspected in Ukraine) is limited as flush toilets are preferred.

After the ELA Programme is over, some level of continued monitoring on the proper use and maintenance of the constructed UDD toilets remains desirable to ensure sustainability and to learn lessons on longer periods of UDDT use. Continued monitoring is also needed because experience - especially in developing countries- has demonstrated that many donor-funded toilets or latrines are not (well) used anymore after a certain period of time[9].

School UDD toilets

WECF constructed the first UDD school toilets for a school in Romania in 2003, replacing smelly and dirty pit latrines which pupils and teachers alike avoided using. Based on the success and experiences since

[9] Some sources mentioned that 1 in 5 toilets is still properly used after 5 years.

then, also school toilets were planned to be implemented under the ELA programme. In 2008 – 2009 about half of the ELA partners implemented blocks of UDD toilets for one or more rural schools in areas without central water supply and/or sewage systems. In a school in Armenia existing non-functional flush toilets were replaced by UDD toilets.

After assessing the needs of a school and the interest in and commitment to eco-sanitation of also the school management, the technical designs were prepared by trained local specialists. WECF's sanitation expert conducted a final check of the design. The actual construction was usually by a local contractor, with assistance and supervision of the local partner. The relative complexity of school toilets, such as the required urine piping system and large urine reservoirs, made that for a few partners school toilet construction got delayed, e.g. because of the involvement of insufficiently qualified local builders. Such constraints could usually be addressed by additional support of WECF staff. In some cases getting the required permission of relevant authorities also caused delays. Another reason for delay was the postponement of paying co-financing by Local Authorities earlier agreed upon.

Also for school toilets training and awareness raising were of crucial importance. Next to training of the partners and builders on technical aspects, the focus was on creating awareness among the school staff and the pupils regarding the purpose and proper use of the UDD toilets. Special training was for the cleaning staff of the school, since proper cleaning and other maintenance –next to proper use- is a pre-condition for the sustained success of the UDD toilets.

In the period between 2008 until 2010 school toilet blocks were constructed for 39 schools in total with ELA funding including 7 toilet blocks with 44% SSHD co-funding. The 39 school toilets include a public toilet for an information centre (by partner Vozrojdenie), a toilet at a church, toilets for a nuns' monastery, a mosque and a madrasa, and the toilets for 3 schools which have not yet been (fully) implemented: one by SAFO (due to construction mistakes), one by RCDA (waiting for the promised contribution of a local private business, most building materials are purchased) and one by Vozrojdenie (waiting for the promised contribution by the local authorities). The average direct costs of school toilets amount to nearly 12,000 Euro per school, of which 84% was contributed by MFS1 funding. There are 10.747 direct beneficiaries (school children and teachers including SSHD and SDC co-funded toilets) and the average cost per user amounts to 46.22 Euro per beneficiary when all direct costs are considered; or 39.64 Euro when taking the investment by the ELA programme.

Use of urine and faeces

Urine, if applied according to the WHO guidelines, is a valuable fertilizer. The experiences up till now with the use of "ecosan products" are different per partner and per situation. The majority of the interviewed partners reported that households apply the collected urine in their gardens: some only for decorative plants and/or trees, and others for vegetables or other crops. Two Georgian partners reported reluctance towards the use of urine for agriculture. In the project area of PAROS there is a general refusal among the beneficiaries who fear a changed taste of the crops. This partner plans to have a demonstration in autumn applying urine on land where next season potatoes will be cultivated. In the second case, which concerns the construction of UDDTs in a monastery by ELA partner Greens, the bishop forbade the application of urine. But other partners reported interest of farmers in using urine, for example, one partner (CAAW) knowing 3 farmers buying urine from their neighbours.

There are also households where the frequent need to empty the (small) urine tanks is seen as a burden. To remedy this, there is a tendency that new designs of household UDD toilets include larger urine tanks. The Kyrgyz partner KAWS reported that at community level a pump was bought to empty such larger tanks for a small amount of money.

The application of school urine is usually more complicated than household urine because of the larger amount. Good experiences are still limited, also because most school toilets were rather recently constructed and do not all have full tanks yet. Some schools (intend to) apply urine in their school garden, however, a main challenge is to find potential users (farmers) who also have the equipment to collect and spread the urine over agricultural fields. Some partners contracted farmers who pump the urine into tanks to later apply on their land, see box 3. Some other schools have borrowed a pump and use the urine on (demonstration) fields near by the school.

Box 3. Use of urine from school toilets in Armenia

AWHHE reported that the urine from 3 school toilets was applied -before sowing- in 3 fields of winter wheat and in a field with green beans. The results from the bean field were positive: the farmer noticed a clear increase of yield and would like to use urine in the future as well (no information on the wheat crops yet).

Most partners cannot yet report on the use of faeces. After a vault or container is full two years of composting are needed before safe use of faeces can be guaranteed. However, there is (positive) experience among some WECF partners on the composting and use of faeces from toilets constructed in earlier projects.

Satisfaction and effects of UDD toilets

The interviewed partners and other sources confirm that the large majority of the UDDT beneficiaries are satisfied or highly satisfied with their new toilets. The visit to the project village Bolduresti of WECF's Moldavian partner WiSDOM demonstrated the change in attitude towards sanitation. The mayor of this village, where about 40 UDD toilets were constructed (by MFS and SDC funding), reported that the issue of sanitation had changed from a taboo to an acceptable topic. During this visit reactions were obtained such as "*Visitors are amazed how an eco-toilet can have a high standard, clean and without a hole in the ground*".

The interviewed partners and the database mention as achievements of the UDD toilets:

- No smell, flies or rats anymore; a fresher environment around the toilet;
- No need to move the pit latrine anymore once the pit is full;
- More hygienic and clean;
- More comfortable to use, not too cold in the winter and dry when it is raining;
- More privacy ("*others cannot hear you*") and more secure;
- Beautiful look, more status ("*no shame to invite guests to the house")*;
- No water wasting for flushing; and
- Good fertilizer.

Some respondents mention the advantage for elderly people and women to have a more comfortable toilet; someone else rather observed that the stairs, required in most designs to enable the vaults underneath the UDD toilets, can be a disadvantage for elderly people. Other disadvantages for some users are the need to remove and carry the urine and faeces and the concern on the safety of the faeces.

The interviewed partners were asked whether they had already observed concrete impacts such as poverty or health effects. Most did not have any quantitative data; the scale at which UDD toilets were built neither yet warrants a significant effect. Still, some anecdotic evidence was presented, such as "d*iarrhoea and hepatitis seem to have decreased due to the toilets and the hygiene education"* or *"the well water became cleaner, at least the colour is now lighter".* The Kyrgyz partner CAAW, who has longer experience with eco-sanitation, informed that the UDD toilets, next to less cases of diarrhoea, also prohibit small children falling into the hole of pit latrines, something that even caused child mortality.

All partners provided clear evidence of the yield enhancing effect of urine as a fertilizer. Urine is being applied for a wide range of crops, such as vegetables grown in glass houses or kitchen gardens, fruit and nut trees, and field crops. Some partners conducted trials or demonstrations. Examples of yield increase due to the application of urine as a fertilizer:

- 3.5 tons of tomatoes from a same area that before yielded 600 kg;
- Trial with wheat that resulted in an average of 47 seeds per ear with normal fertilization against 89 seeds applying urine;
- Clover now harvested 5 times per season against 3 times without the use of urine;
- A farming family doubled the vegetable yield of their homestead plot, allowing the sale of surplus produce, which provided the family with cash income.

In two cases the increase of organic matter in the soil was reported due to composted human faeces.

The collected information confirms that also the users of the school UDD toilets are largely (very) satisfied. But it is hard to already assess the extent of the impact of the new toilets, including the hand washing facilities and hygiene promotion, on the health of the school children and teachers. Some effects seem likely but rather hard to measure. The availability of hand washing facilities appears to have greatly increased the incidence of actual hand washing after toilet use. The availability of comfortable toilets close to the school building enhances the use of toilets and would stop the previous habit of not drinking any liquids to avoid the use of the old dirty latrines.

Most obvious seems the reduced absence of girls who no longer prefer to stay home during menstruation. This is confirmed by the testing of a questionnaire on the health effects of school toilets presently being investigated by a survey led by WECF in several Central Asian countries. Some examples of (anecdotal) evidence of improvements provided by partners:

- The old toilets were far from the school and some cases of rape or stealing of earrings from girls were reported. This will not happen anymore with the new toilets close to the school;
- The school inspectors were very impressed by the new toilets and decided to renovate the whole school building;
- The school did not have toilets before. Since the UDD toilets have been constructed, the number of students increased and the absence among girls and teachers was reduced by about 50%;
- Since the school has the UDD toilets, the entire school is kept cleaner, there are more visitors and the school community is more proud.

Several partners also reported the creation of employment as an effect of ELA's sanitation component, see also the section on replication.

Outcomes

Quantitative monitoring data on the two sanitation related outcome indicators of the Monitoring Protocol are not yet available. The first indicator concerns the number of users of well maintained UDD toilets, including the use of hand wash facilities. The level of aspiration is 4200 people in households and 10,400 school children. In 2008 -2009 5268 persons benefited from household UDD toilets and 11,302 from school toilets. Since the interviewed partners reported that almost all constructed UDDTs are actually used, it seems likely that the target has been approximately achieved, though it is less clear when a toilet can be defined as "well maintained". The second indicator concerns the number of households re-using the eco-sanitation products (urine and composted faeces) as fertilizer (target 560 households). The interviews with partners seem to indicate that a significant part of the beneficiary households (637) apply urine as fertilizer, but also that reluctance is still found. This target may therefore not yet been achieved; however, partners continue working on attitude change in this.

Replication

The interviewed partners reported that there is much interest from neighbouring households and schools to get UDD toilets themselves; there is also demand for the technical design. Many partners also know examples of actual replication financed fully by the households themselves. RCDA reported 11 UDDts built without any subsidies, most other partners knew about one or a few toilets. Many partners have (long) lists of households interested in getting a subsidized UDD toilet. Even if families are able to cover all the costs by themselves, many have an attitude of wanting subsidies like they saw other beneficiaries receiving. A main challenge now is to get a breakthrough in this attitude and achieve that households become willing to pay the full costs by themselves, possibly by a special financing construction, such as micro-credit. Examples of such an approach can be found in Kyrgyzstan, where two WECF partners (Central Asian Alliance for Water (CAAW) and KAWS) implement UDD toilets financed by micro-credit. Box 4 describes a case of the latter organisation being in the process of implementing 116 UDDTs.

Box 4. Approach of KAWS for the implementation of household UDD toilets

KAWS is not an ELA partner from the beginning. In 2009 they joined the ELA partnership to complement ELA partner HFHK micro-finance expertise with KAWS technical implementation capacities.
KAWS works with networks of Community Drinking Water Users' Unions (CDWUUs). The CDWUUs run drinking water supply systems and are responsible for operation, maintenance and collecting fees. The concerned communities lacked proper sanitation facilities; existing pit latrines were cold, smelling and remote from the house. After being in contact with WECF they became enthusiastic about the UDDT concept. KAWS signed a MoU with WECF and HFHK to collaborate with the implementation part of UDDTs whereas HFHK would provide micro-finance.
KAWS' approach consists of the following steps:

- Dissemination of information on the concept of eco-sanitation / UDDTs and on the micro-finance procedures and conditions
- Preparation of selection criteria of households
- Campaigns in 16 target villages providing more information and encouraging interested households to apply (result: 265 applications of households who were aware that they had to repay all costs)
- Selection of households after visiting them
- Creation of ecosan groups representing the selected households and ecosan clubs in schools
- Training of mobile construction groups and construction of 4 demonstration UDD toilets (ELA funded) in offices of Water Users' Unions and headwork of the water supply system
- Agreement signed between the CDWUU and the household; upfront payment of 25 USD
- Provision of construction materials by the CDWUUs paid by HFHK (no loan money directly to the households)
- Construction of the UDD toilets by the mobile teams.
- Training on the use, maintenance and cleaning of the toilets (poster provided)
- Collection of the repayment will go together with the fee collection for the drinking water. The total costs amount to 500 USD which will be repaid in 2 years. The loans have to be repaid to HFHK in 3 years, allowing one year for "safety".

At the time of the interview (September 2010) 46 UDDTs had been constructed and handed over, 31 were under construction and 39 more to be constructed thereafter.
According KAWS the factors contributing to the households' willingness to pay the UDDT's full costs are:

- No charity, as charity spoils (thus no subsidized demonstration toilets for households)
- No force, but good provision of information and exchange visits
- The presence of the CDWUUs which have a good reputation and are respected.

The above case is an example where the construction of 4 ELA financed toilets is currently leading to replication of about 100 UDDTs. The discussions with WECF staff and partners revealed various other examples of replication. In Moldova the Swiss Development Corporation (SDC) adjusted their eco-sanitation approach based on WECF's technology and awareness raising approach. Up till now SDC has co-financed the construction of 38 UDDTs in WiSDOM's project village, as well as 10 school UDDT blocks

with ELA technical support and supervision and WiSDOM's and Ecotox' education, partly financed by ELA. SDC also funded ecosan publications, toolkits and research on the re-use of urine in agriculture (by Ecotox). The US Embassy in Moldova announced recently (October 2010) to finance the construction of toilet facilities with UDDTs for 9 schools through SDC, again based on WECF technical designs; the WECF partners WiSDOM and Ecotox will provide the "software", such as training and awareness raising. WECF partners from Georgia also reported interest from other donors: RCDA trained various donor representatives in eco-sanitation concepts (e.g. Oxfam, Action contra la Famme and WFP) whereas SAFO reported to be invited by a donor to present this concept. In Kazakhstan ELA partner MCJM presented the dry toilet concept to interested oblast authorities in South Kazakhstan. Kyrgyz partners Unison and ALGA built a school UDDT with financial support of German Embassy to Bishkek. Various ELA partners also included an eco-sanitation component in other project proposals. At present such EU projects are being implemented -or will soon start- with partners from Azerbaijan, Ukraine (one with Black Sea Women and another one with Mama-86) and Georgia.

Construction capacity

A main prerequisite for replication of UDD toilets without WECF or WECF partners' support is the availability of local design and construction capacities. Most partners have conducted capacity building for UDDT building; in total 2,238 persons were trained; these were mostly the prospective owners of the UDDTs, which included local craftsmen. Several partners took initiatives to explicitly develop teams of craftsmen who are well trained and experienced in constructing UDDTs, for example, by RCDA in Georgia, MCJM in Kazakhstan and KAWS in Kyrgyzstan. RCDA developed the concept of Business Groups, see Box 5.

Box 5. RCDA's Business Groups as a way to replication.

To achieve that UDDTs continue to be constructed but without the support of the ELA partners, ELA partner RCDA of Georgia supported the establishment of three Business Groups for UDDT construction. The groups' craftsmen were trained and supported by RCDA. Now the Business Groups can provide services regarding UDDT construction, building one UDDT in three days. RCDA directs persons interested in UDDTs to the Business Groups. And the Business Groups motivate households to have an ecosan toilet for a healthier life.
Up till September 2010 11 UDDTs were build without any subsidies and more potential clients are coming to the Business Groups. For households who cannot pay all costs at once, a leasing system will be developed. A portion of the costs is paid to the Business Group at the time of construction; the rest is repaid at a monthly or seasonal basis, agreed upon in a contract.

More ELA partners are supporting the development of similar Business Groups or are developing somewhat alternative ideas. For example, BIOM of Kyrgyzstan intends to approach existing building companies to make them aware of the eco-sanitation concept and build their capacity to properly construct UDDTs. The idea is that when someone wants to (re)build a house in a rural area without water supply and sewage facilities, the building company suggests the UDD toilet as a valid option.
In Georgia 5 regional resource centres are being established in the frame of an EU project that will offer advice and hardware on alternative technologies such as UDDTs.

Some partners mentioned the difficulty to obtain proper seats or slabs enabling separate urine diversion as a constraint for replication without WECF support. However, in most target countries expertise for seat construction is (becoming) available and/or alternative solutions are being tried out, but this indeed remains a factor possibly hampering replication.

2.2 Drinking Water

About half of the ELA partners implemented activities related to drinking water. Activities implemented and results achieved were less uniform than those on eco-sanitation and consisted of awareness raising, monitoring, providing, and/or restoring access to safe water. ELA's water activities were generally

characterised as participatory and emphasizing awareness on water issues. But even partners who did not implement activities categorized under "water" usually included basic information on water issues in other activities, in particular in awareness raising on sustainable sanitation.

Training and awareness raising

WECF's monitoring data for 2008 - 2010 demonstrate the following:

- In 2008 - 2010 the water quality of 45,973 people was monitored, in particularly by measuring the nitrate (NO3) content. In rural areas of the target countries this parameter is a good indicator of the quality of ground water since the nitrate content appears an acceptable proxy for anthropogenic pollution. One partner, ASDP Nau from Tajikistan, did nitrate testing for nearly 35,000 people; this number apparently includes relatively larger schemes of which also a number were rehabilitated by ELA funding, see below.
- 6 partners provided training of trainers (ToT) to in total 1,341 persons, 185 trainers fulfil the criteria to have given advice to at least 10 people on water issues.
- In total 17,188 persons received information on water issues.

A special approach which WECF developed further during ELA –from WHO- is the concept of Water Safety Plans by schools. Water Safety Plans (WSPs) concern the review of the present water situation, identification of risks, causes of problems, possible steps to improve the situation and a public meeting, all resulting into Action Plans for improvements. An underlying assumption is "*local solutions for local problems*". The steps of the WSP approach include the training of two teachers per school, provision of a manual and actual work with students during one academic year, including regular nitrate testing of local water sources like wells. The latter led to some interesting findings on nitrate fluctuations over the year. Water Safety Plans were implemented in 2009/2010 in 14 schools in Armenia (2), Georgia (4), Ukraine (4) and Moldova (4). In Central Asia the need for WSPs was less felt since the PHAEST already paid attention to water issues. It was reported that the WSP process was generally seen as successful, with increased awareness as a main effect.

Drinking Water Supply

7 ELA partners implemented new water sources (mostly wells) or rehabilitated systems that were not functioning anymore. In total 51 small or larger systems were built or improved, benefiting nearly 21,000 people. The bulk of these beneficiaries (18,490) were reached by ASDP Nau of Tajikistan, rehabilitating 7 old soviet systems mainly by replacing broken down pumps. In Armenia a piped gravity system was rehabilitated, benefiting a village with 1340 people. A common approach promoted by WECF for community systems is the formation or re-activation of water committees, who have to collect water fees and ensure the operation and maintenance of the system. In case of the village of Armenia, a partner from Kyrgyzstan with good experience in working with Community Water Committees (KAWS), visited the village and provided advice on how to organize a water committee.

Miscellaneous water related activities

Some partners or WECF staff reported on other water related activities, which are not listed in the monitoring overviews. In Moldova rainwater harvesting systems were implemented, after a practical training, which included the determination of the size of the reservoirs. Also 10 water filters of a new type (ceramic with silver coating) were given to households to be tested through the ELA programme.

Results and replication

The interviews with partners which implemented water related activities provided some insight in the main benefits and results:

- The rehabilitation of water supply systems ensured access to safe water to households and local institutions, such as a medical centre, including more convenience ("*now water available for 24 hours per day");*
- The replacement of shallow wells with unclean water by 36 deeper wells with a pump, meant also increased access to safe water (Georgia);
- The activities related to water quality testing, training and information provision reportedly resulted in increased awareness among the targeted people, raising their interested in also the *quality* of the water they consume. Also the local authorities of the targeted communities apparently became more aware on water quality issues and pollution risks.
- The Water Safety Plan exercises were largely liked by the children and the teachers. It was reported that children tend to influence their parents, whose awareness on water issues also was enhanced. Some respondents gave examples of changes in behaviour of the parents as a result of the WSP exercise, such as using another well with good water instead of one with polluted water. Teachers with a relevant subject, who were involved in the WSP, tend to integrate sustainable water and sanitation issues in their regular teaching.
- The pilots of WiSDOM with rainwater harvesting ensured water availability near the home, which was especially appreciated by elderly people with difficulties fetching water from a large distance. Experiences were positive and a concrete project proposal on rainwater harvesting at a larger scale will be developed for South and Central Moldova where water shortage is faced during summer droughts.
- Sustainability of community drinking water systems is tentatively achieved by community water committees, also promoting local democracy. The establishment of these committees, however, is still too recent to well assess their functioning.

Outcomes

The first outcome indicator of the monitoring protocol concerns the number of communities with drinking water protection strategies, i.e. the communities for which Water Safety Plans have been prepared. The target was 30, but 14 WSPs have been actually developed. A main reason was lack of priority for WSPs by (mainly) Central Asian partners because they already paid attention to water issues in their PHAEST exercises. The second water related outcome indicator is the number of people receiving access to water of EU quality standards due to the ELA programme. Though the precise water quality of the new or rehabilitated systems is not reported upon, it appears that the target of 2900 people is substantially exceeded as nearly 21,000 users got (better) access to safe water.

There is replication of the Water Safety Plan approach. Implementation of WSPs is continuing in WECF projects in Azerbaijan (6 schools) and Moldova (8 schools), as well as in other partner projects (Church World Service, CWS 1 school with RCDA and 6 schools with Georgian coalition financed by EU). WECF staff has trained 4 schools in the WSP approach for another French NGO.

2.3 Agriculture

The main activities under the theme of agriculture consisted of training on sustainable agriculture, implemented by 7 of the ELA partners and reaching 5,431 persons, 59 % of whom were women. Such training focused on two subjects: (1) explaining the characteristics of sustainable or organic agriculture (crop rotation, intercropping, use of organic fertilizers including green and animal manure and urine, no use of chemical fertilizers or agrochemicals and practicing composting); and (2) training on composting. The latter integrated the use of the eco-sanitation "products" in the practice of composting. WECF developed a manual with Composting Guidelines, adopting a manual of Agromisa (a Wageningen based advisory organisation on agriculture in developing countries) to the circumstances in EECCA countries, integrating the use and composting of urine and faeces. Several partners also conducted training of trainers (ToT) on sustainable agriculture, training 108 trainers (56% women).

Various partners supported or implemented actual agricultural activities, in particular demonstrations. Seven partners implemented 73 demonstration farms. Though all demonstrations included elements of sustainable agriculture, 27 met the minimum criteria for sustainable agriculture as set by WECF[10]. An example is PAROS of Georgia, who implemented a demonstration growing seed potato as a cash crop, which eventually provided cash income to 12 families. Several ELA partners, such as AWHHE of Armenia, (interviewed), SEMA of Georgia and ULGU of Kyrgyzstan (not interviewed), had already a focus on agriculture before the start of ELA and they continued to work more intensely in this subject. AWHHE, who was also interviewed 3 years ago at the end of the TMF programme, greatly expanded the number of involved farmers from a few to 700 who are currently practicing sustainable agriculture, see Box 6.

Box 6. AWHHE's Agriculture component

Under WECF's TMF Programme (2005-2007) AWHHE (Armenian Women for Health and a Healthy Environment) had its first experiences with farmers adopting sustainable agriculture, focusing on vermin-culture (bio-humus) and alternative pest control. The ELA programme built on this, reaching 700 farmers by 2010. Next to training and awareness raising (e.g. field schools on composting), organic seeds were distributed. Where UDD toilets have been built, the use of urine is promoted as an integral part of sustainable agriculture and trials demonstrated yield increases due to urine application. In particular the composting component is very successful: farmers are very happy, they observe increased yields and some even sell part of their compost. Though the agricultural expert of AWHHE still has to quantify yield increases, AWHHE has a clear impression that farmers are now better off. AWHHE is also promoting and preparing farmers for certification for organic production, which is a long process. Up till now 2 farmers have been certified.

Outcomes

In the monitoring protocol two outcome indicators were formulated for agriculture: (1) 30 % of the rural population participating in the demo projects on sustainable agriculture; and (2) 40% increase of the rural population practicing composting. At the time of writing this report it is still difficult to assess whether these targets have been achieved. At least the WECF monitoring data seem to indicate an increase of composting by target farmers, even though baseline data is lacking. This trend is confirmed by interviews also giving evidence of an expansion of the practice of composting. The number of demonstration projects on sustainable agriculture, however, may be less than initially expected.

2.4 Energy

Like the agriculture component, which evolved differently than expected during the ELA programme, also the energy component did. In case of energy, the proposal was still vague about concrete implementations, which also offered opportunities. 2008 was mainly used for capacity building of partners, which created demand for demonstration projects in 2009, resulting in some surprising successes.

Capacity building and technology development

In 2008 ELA staff visited a number of interested ELA partners to discuss interest and options for renewable energy demonstrations. In this year selected WECF partners received their first training. 8 partners started the dissemination of information on (renewable) energy and saving measures, reaching out to 2573 persons (54% women). In 2009 13 partners were active in information provision, reaching 1791 persons (49% women).

[10] A demonstration farm fulfils WECF criteria if it includes at least 4 out of the following practices 1) crop rotation; 2) intercropping; 3) organic fertilizer; 4) no use of chemical pesticides; 5) no use of chemical fertilizers; 6) composting. Practice 3 and 4 should at least5 be included. Examples of demonstrations not meeting the WECF criteria for sustainable agriculture are the CAAW demonstrations on Integrated Pest Management (IPM).

The training on renewable energy of the staff of partners was always characterized by a very practical approach often involving the actual construction of pilot models. A first training / excursion was organized in 2008 for 40 participants from EECCA countries in Munich, where partners visited demonstration projects and companies involved in manufacturing solar equipment. This resulted in a strategic partnership with the German company Solar Partner Sued. Staff of a several ELA partners got the opportunity to do an internship at Solar Partner near Munich, but Solar Partner staff also travelled to some ELA countries to train, advice and assist in the adaptation of designs of solar warm water collectors to local conditions. There were also exchanges with students of the Université de Savoie / IUT Annecy (France) focusing on technology development.

The ELA partnership chose to focus on solar collectors (to heat water) and solar fruit dryers because these can be built locally using locally available materials[11]. A challenge overcome by ELA partners and the above mentioned co-operators, was the development of a low cost solar collector able to withstand temperatures below zero. Different partners experienced with different (local) materials, leading to designs costing about 200 Euro. The visit to Tatarbunary illustrated that partners still continue to experiment by trying out different materials, especially for the solar collectors. For the solar dryers WECF selected models that were easy to construct, which was practiced at training sessions with the partners. Also for the solar dryers local adjustments were made based on the materials and budgets available, which led to different solar dryers for different conditions and requirements, with material costs between 50 - 200 euro per dryer.

WECF staff reported that during the 3 years of the ELA programme the capacity of the partners who are working on energy was built up from practically zero to a good level. These partners demonstrated great interest in building their capacity on energy issues, resulting in 12 regional training events during the project period, partly organized by WECF and partly by the partners themselves. This is a good indicator of their increased awareness on the importance of energy and climate change. More than the demonstration units, this built-up capacity is an important ELA output, since it will enable replications and dissemination of knowledge.

Energy demonstration projects

The awareness raising and training of target groups and ELA partners in 2008 created demand for the actual installation of solar devices in 2009. According to WECF's monitoring table 87 demonstration units were implemented by the end of 2009 by 13 partners (in 2010 some more were implemented but no accurate data available yet). The 147 units include 41 proper solar collectors and 23 fruit dryers. Simple solar water heaters were implemented by two partners[12]. A few partners implemented other energy related demonstrations such as biogas installations (3), a mini-hydropower generator, a solar green house and some energy efficiency measures as insulation of 3 schools. WECF's monitoring data report that 1,931 persons are benefiting as users, which apparently are the users of the warm water or members of households using solar fruit dryers. The same monitoring sheet provides the aggregated costs of the materials used for building the solar installations by partner. But since the 147 sustainable energy devices are of very different categories, the average cost per demonstration unit does not provide really useful information. This is also illustrated by the fact that the average costs per partner (total costs per partner divided by the number of implemented units) varies highly, apparently mostly depending on the kind of installations built and technology used. Of the total costs spent on materials for the 147 devices (57,439 euro) about 17% on average was contributed by the beneficiaries.

[11] In contrast to solar panels for energy generation, which require more sophisticated technology, such as photovoltaic panels

[12] BIOM implemented 18 "solar batch heaters", consisting of black tanks covered by glass to heat water in summer time; Green Movement implemented 14 simple collectors consisting of a black box (1-2 litre content) at the outer wall of new UDD toilets to provide warm water for hand washing.

Use, benefits and outcome

The **solar collectors**' purpose is providing warm water. Of the 31 proper solar collectors constructed or provided with ELA funding, about 25 are reported to be working and 3 having rather severe problems. Most of the concerned partners have sufficiently trained and skilled staff and are able to address the problems, when necessary with the advice of WECF's energy coordinator. The benefits of the ELA subsidized solar collectors can be summarized as:

- Availability of warm water for hand washing, showers, washing clothes and dishes. Sometimes also neighbours use the warm water;
- Increased convenience and comfort;
- Better hygiene by the family members of beneficiary households because of more frequent (hand) washing and showers (e.g. from once a week or less to several times a week);
- Potential for saving money because beneficiary households reduced spending on heating water by conventional energy (fuel wood, gas or electricity) or do not spend anymore on using the public bath ("*banja"*). A respondent informed that a family of 5 members can save 5 euro weekly by not having to use the public bath anymore.

A good ELA-wide analysis of the (costs and) benefits of solar collectors, including savings on expenditure, is not yet available, but it is expected that the current monitoring (end 2010) will pay more attention to this.

Solar dryers are installations that create a flow of warm air to promote a more speedy and more uniform drying process of fruits, medicinal plants, herbs and/or vegetables (e.g. sliced egg plant or mushrooms). ELA partners experienced with and implemented different models of dryers, with different designs and capacities. Common features of the dryers are drying without exposure to the sun and use of locally available construction materials. Actual construction is mostly by the beneficiaries themselves with technical support and subsidies for the material from the partners. The advantage of these dryers is a quicker, more uniform and more hygienic drying process, avoiding direct sun (which affects the quality of the produce). For example, slices of apple can now be dried in 1.5 – 2 days, instead of a week. Solar dryers were discussed with three ELA partners (including visiting one in Moldova) and all reported unanimously about the enthusiasm of the beneficiary families, see Box 7 for the experiences of the Armenian partners.

Box 7. Experiences with solar dryers in Armenia

Two Armenian ELA partners implemented solar dryers, each of them reporting an enthusiastic use of the dryers. Lore Eco Club reported that fruits used to be dried on trays heated by gas or electricity (e.g. in an oven), which not only increased the family's energy bill, but also had a risk of burning and affecting the nutritional value. The resulting dried fruits were often not attractive enough to be sold. With the new solar fruit dryers several effects are achieved: the fruits dry quicker (if compared to open air drying), more uniform, look attractive and are suitable for sale. Hence this will contribute to poverty reduction (more nutritious dried products, sale of surplus products and savings at the energy bill) and CO2 reduction by reduced use of conventional energy. "*It is a success story, everyone wants one".*

The Armenian Women (AWHHE) reported that in their villages solar dryers replaced drying in the open air and direct sun. That drying process takes about a week, which is reduced by the solar dryers to 1-2 days (5-10 kg of fresh fruits). Drying in the open air also holds the risk of fungi at times of relatively high humidity levels.

The benefits of solar dryers can thus be summarized as more and better quality food preservation, less fruits spoilt, increased potential for income generation, including a better price due to the better quality, and a reduction in energy costs where solar drying replaces drying using conventional energy or other ways of food preservation such as bottling which require energy.

The beneficiaries of the biogas installations reportedly are positive, though mostly appreciating the good quality of the manure that results from the composting process in the biogas installation (cow manure)

which is highly appreciated as fertilizer. The gas of the Georgian installations is enough for 1-2 hours of cooking per day.

There is no information available to what extent the awareness raising and outreach to the over 4000 persons resulted in energy saving by simple measures at household level.

The outcome indicator for ELA's energy component was formulated as the percentage of the rural population willing to invest in sustainable energy systems (target: 60%). The interviews conducted during this evaluation confirmed the interest in replication by neighbouring households, but this cannot be quantified. The WECF outcome monitoring at the end of 2010 is addressing this indicator.

Replication

All partners with whom solar collectors and/or dryers were discussed reported that there is demand for replication. There are already examples of other households constructing a solar dryer without ELA subsidies. The Armenian partner Lore Eco Club ensured a replication of 60 dryers financed by UNDP / World Vision, with technical training provided by ELA through Lore Eco Club. Without the ELA pilot dryer and ELA training, these 60 dryers would never have been constructed. It seems realistic to expect more replications without subsidies, provided that expertise and advice remains available. Lore Eco Club opened a "hotline" for people to ask questions about solar dryer construction.

There is also potential and demand for the replication of the solar heaters, but the technology for these is more complicated than for the dryers. A majority of the ELA partners with experience in solar collectors understand the underlying techniques and have the skills to continue replications on their own, but several others lack such staff and hence would require further support, either by WECF or other partners.

Most of the interviewed partners who did not implement any renewable energy or energy saving projects, have become highly interested in this subject. Some even regretted that during ELA they did not get (or take) the opportunity to implement energy pilot projects. They hope that in the near future other opportunities will arise, because they their target population would also be highly interested.

The technologies are further replicated and refined in follow-up projects of WECF with partners in countries such as Azerbaijan, Georgia, Ukraine, Moldova and Armenia, e.g. in the EU Project in Georgia.

2.5 Capacity building

The capacity building programme of ELA aimed at building the capacity of the ELA partners to implement the projects on sanitation, water, agriculture and energy. This was achieved by 57 training events or study tours between 2008 and 2010 for total 907 staff members of partner organizations, see Annex 6. Training workshops were mostly on water (21[13], especially water safety plans), energy (also 21, on theory and practical issues, such as solar collector construction) and sanitation (20, mostly on (advanced) UDDT construction). A few training workshops also dealt with sustainable agricultural (3), mostly combined with relevant sanitation issues, such as the use of "ecosan products" in agriculture. The expenses of capacity building of the ELA partners were covered by the WECF managed part of the ELA budget. In 2008 130,000 euro was spent; in 2009 200,000 euro, and for 2010 75,000 was allocated.

For several components (in particularly energy) study tours were key in raising the interest of the partners and giving them a (first) understanding of the subject in practice. An example is the study tour on energy and climate organized by WECF for 40 participants of EECCA countries to the Munich area in

[13] This includes also a few training events that covered more than one topic, e.g. water and energy. Hence the total per topic add up to more than 57.

Germany to visit demonstration projects and companies manufacturing solar equipment. The ELA training programme appears well based on needs and demands of the ELA partners. A characteristic of the ELA coordinated training was the inclusion of practical work during the training workshops, enabling the participants obtaining actual experience in the construction of demonstration projects. This also contributed to adjustments of existing designs to local situations and materials. A special event in this context was the knowledge exchange meeting[14] in Khoni, Georgia, in November 2009, with 40 representatives from 11 countries, sharing the experiences and best practices of all partners regarding ecological sanitation.

Most training was conducted by the WECF staff subject matter specialists and/or the field coordinators, who had acquired adequate expertise and skills. Also other experts became involved as trainers in capacity building workshops, for example, the German company Solar Partner Sued. Annex 7 provides an overview of 28 WECF Publications produced in the context of the ELA Programme, which are mostly targeted at partners and other stakeholders in WECF's target countries.

Effects of the capacity building

All interviewed partners were highly convinced that the ELA Programme had considerably increased their technical capacities related to the content of the activities and components they implemented with ELA support. WECF staff holds the same opinion. The capacity building lead to the following effects or spin-offs:

- Most partners have now in-house expertise regarding one or several ELA thematic areas.
- In many target countries one or more partners have developed themselves into specialists and/or trainers in one or more subjects, with the capacity -and commitment- to also advice and train other partners. There have been several exchange visits among partners to see (school) UDDTs.
- Another good example on energy expertise is Nugzar from Akhaltsikhe, Georgia, who developed excellent technical and training capacities on the construction of solar collectors during ELA and was hired by WECF as a trainer for a solar collector seminar in Ukraine in July 2010. He will also work for WECF as trainer in future projects. Another example is the planned exchange visit where a specialist from the Kazak partner UGAM will advice the Uzbek partner Mehriban on solar dryers and collectors.
- Various partners submitted proposals to other donors for replication of projects for which they were trained by the ELA programme.
- Some partners have also started training of others than their direct beneficiaries in one or more of the ELA technological solutions. In particular, some partners informed or trained representatives of donors, e.g. in ecological sanitation subjects. In various countries representatives of (local) government or specialized institutions, such as the Sanitary and Epidemiological Authorities (SES), were informed about alternative solutions, e.g. for UDD school toilet construction.
- The chances for sustainability and multiplication of the ELA programme's results have been considerably enhanced by the intensive technical capacity building of the ELA partners.

Outcome indicators

WECF's Monitoring Protocol includes two outcome indicators for the Capacity Building Programme. The first one is the number of citizens reached through publications (target: 55,000). This appears related to the corresponding outputs of brochures and other materials distributed (to 87,489 persons by the end of 2009) and the estimated number of readers of relevant newspaper articles (465,820). This outcome therefore seems well achieved.

[14] This so called "ELA Open Space" tradition was started in November 2008 in Kyrgyzstan with Central Asian partners at Issyk-Kul lake.

The second outcome indicator is the number of partner organizations feeling that participation in the ELA programme significantly improved their capacities regarding project management, financial management, monitoring and reporting, participatory methodologies, fundraising, working with the press, policy making and technical skills (target: 33 partners). Of the 32 partners involved in ELA in 2008, a few had dropped out after one year because the ELA subjects either did not connect to their core activities and/or due to their too weak capacities (all had received minor grants only in 2008). If the two partners, who did not receive ELA money in 2009 and/or 2010 because of being involved in another WECF project, are also counted, the number of partners whose capacities were actually (well) built by ELA amounts to 28[15] (this includes FCE and GEBMA). All interviewed partners were very resolute about their increased technical expertise and improved expertise related to project design and management, including logframe development, financial management and monitoring. The project management expertise was built up in practice, with support of WECF especially when questions arose or mistakes were made. Some partners suggested that some specific training on project management related subjects would have been useful, even though all are convinced that their expertise actually did improve. The same applies to expertise in fund raising: various ELA partners were involved in developing new proposals, in partnership with WECF and/or other partners, and thus increased their capacities in this subject as well.

Also the capacities of WECF staff were increased by implementing the ELA programme, in particular in programme management and monitoring, since this was WECF's first programme implemented at this scale and with this number of partners. WECF's technical expertise increased too: in particular regarding the implementation of alternative technologies on a bigger scale.

2.6 Democracy

In the original proposal the democracy programme focused on reaching, informing and/or involving citizens to make them aware on the approaches of the ELA programme. A second focus was on policy influencing on national and international levels. There were no special guidelines or training modules by WECF for partners on how to elaborate their democracy component.

Output and outcome indicators focused on numbers of radio and TV documentaries, numbers of policy recommendations written (output indicators), numbers of viewers reached by TV broadcasts and number of policy recommendations endorsed (outcome indicators).

There is a rather artificial distinction between reaching out to citizens under the Capacity Building Programme (through written materials) and under the Democracy Programme (through radio and TV). At the same time there are no indicators related to cooperation between the partners (as civil society organizations) and local or national government organizations other than policy influencing, although this cooperation was often a contributing factor towards successful local projects. Below therefore an impression is given, derived from the interviews and other background materials, what ELA's broad achievements are regarding "democracy" or governance.

Involving citizens organizations and local authorities in ELA activities

The ELA programme originally intended to establish at least 20 new citizens´ organizations to ensure public participation in the ELA activities and to eventually contribute to sustainability of the results and further up-scaling. After the start of the programme WECF and partners chose to work rather with existing structures, which seemed a valid decision. Several interviewed partners reported that such committees played a role in beneficiary selection, but there is not much reporting on the further role of citizens' committees. Exceptions are the water users' committees which have been created (or re-activated) in communities where a community water supply system was rehabilitated, requiring

[15] This excludes the partner working in Afghanistan, who is more an implementation oriented partner, and never participated in capacity training events.

centralized operation and management and collection of water fees (by ASDP Nau, CAAW, KAWS and Eco Lore Club). Not much information was found on how well these committees are performing; in case of the water committee in Lore Eco Club's project village, the committee was too recently established to judge its performance.

All partners that were interviewed on this topic confirmed informing and involving local authorities as much as possible, and mostly with good response. This particularly involves informing mayors, other local leaders, local councils, and other relevant local authorities like rayon SES departments. Examples of Local Authorities' interest are the construction of a UDD toilet at the mayor's office with the mayor becoming an eco-sanitation promoter (WiSDOM) and the close cooperation and support that the Ukrainian partner Vozrojdenie is receiving from SES[16] both in water and sanitation issues. Other evidence of interest of local authorities in ELA's activities is their co-financing for school UDD toilets. In three cases in Central Asia authorities or schools contributed financially (30%), some authorities provided sand, labor and/or transportation and in two cases the authorities pay the salaries of the caretakers, though in some other cases the promised contributions were not effectuated for unknown (budget?) reasons. But just the construction of school UDDTs is evidence of the consent by school inspections and other authorities, since their approval is a pre-requisite for replacing pit latrines by UDDTs in schools.

Outreach at country level

The Democracy Programme also aimed to achieve an increased awareness on the approaches of ELA among the population in the target countries with the number of documentary videos on national radio and TV as output indicator (target: 20) and number of viewers reached by TV broadcast as outcome indicator (target: 10% of the population or 15 million people). By the end of 2009 15 films had been broadcasted and authorized by partners and 2 by WECF; more were made and broadcast in 2010. Details on the produced movies were provided in an annex of the ELA annual reports demonstrating that sanitation was the most covered theme, followed by energy. About half were apparently shown on any TV channel; most others are categorized as "films". Some are also available at www.youtube.com/user/wecfeu. There is no (not yet) information on the number of viewers reached.

Policy influencing at regional and national level

Of all ELA partners a limited number –about one quarter- have actually been involved in policy influencing by presenting documents on policy recommendations (56 recommendations by 7 partners), which is one of the two output indicators. Several other partners are gradually becoming more interested in and capable for getting involved in policy discussions and advocacy. An example is WiSDOM becoming more active in advocacy striving for more acceptance of eco-sanitation and the use of urine as a legally recognized fertilizer. Another example is BIOM of Kyrgyzstan with ideas to lobby for the inclusion of eco-sanitation as an acceptable sanitation solution in the regulations for architects and builders ("SNIP" and "SANPIN").

The number of policy recommendations submitted, however, does not seem a very comprehensive proxy to measure a partner's involvement in advocacy activities as illustrated by Mama-86 from Ukraine. Mama-86 did not report on writing policy recommendations (funded by ELA), but their achievements in policy influencing regarding safe water supply and sanitation (WSS) are substantial, see Box 6. These achievements cannot solely be contributed to the ELA MFS1 funding, but is a combined result of also earlier WSS projects and other funding concurrent to ELA. But in Mama-86's view, without ELA the achievements described in Box 8 would have been less probable. This example also demonstrates that for actual changes in policies a longer time span than 3 years is helpful or even

[16] Vozrojdenie reported that SES in their rayon became in favour of the reuse of urine in agriculture due to the lobby work of the Black Sea Women (other ELA partner) already before the start of ELA.

needed, considering that Mama-86 first UDDT pilots were built in 2005, and Mama-86's Kiev office has since then been involved in advocacy on eco-sanitation.

Box 8. Mama-86's advocacy experiences and achievements

A first category of achievements is recognition, for example by being invited by government bodies; a second category is the actual up-take by government bodies of solutions promoted by a partner. Mama-86 has been achieving both:

- The State Commission on Water Management of Ukraine now accepts the concept of eco-sanitation and the need to protect water sources. This commission invited Mama-86 to give a lecture on eco-sanitation and, at a second occasion, to present Mama-86's experience in public participation in water management, also presenting the results of nitrate monitoring (an ELA activity);
- In September 2010 Mama-86 participated in a round table -at the Ministry of Housing and Communal Services- to discuss the Ukrainian draft law revising the state programme "Drinking Water of Ukraine" during which Mama-86 provided comments and amendments. Mama-86 also pleaded for the enlargement of the article of public information and education referring to the Water & Health Protocol, which was apparently well received;
- Change of attitude towards and more acceptance of the participation of NGOs and general public;
- In Mama-86's view their advocacy also led to an increased priority for the protection of drinking water sources;
- Better relations with Local Authorities who increasingly respect Mama-86 as a serious partner, illustrated by the now much quicker issue of legal permission for construction of school UDD toilets;
- In a recent regional conference on waste water constructed wetlands were included as acceptable solutions for improved decentralized waste water treatment;
- The Water Utility of Nova Kahovka asked Mama-86 for an UDDT slab since they became interested in trying out such a toilet themselves by constructing one on their compound for their workers (who did not have a toilet before);
- Mama-86 was invited to present the eco-sanitation concept at an exhibition/conference at Lvov in 2008 with building firms well represented in the audience. One of the spin-offs of this was the construction of 2 indoor UDDTs in the cottage of the director of one firm (in Chernovtsy oblast); another the contacts with several firms to locally manufacture ceramic UDD seats.
- Mama-86 received a certificate from the Patent and Standardization Authority of the registration of UDD toilets as a "patent of a useful model", implying that the UDDT concept is now in this Authority's database and can be used in the building sector.
- Last but not least: The UDDT technology has just been officially recognized (in October 2010) by the Ministry of Health Protection, Department of Sanitation (SES) as a legalized sanitation approach for decentralized situations.

Another example of national level advocacy is the high level policy conference "Ecological Safety" held in Bishkek, Kyrgyzstan (November 2008), with the participation of 150 participants, including the deputy ministers of health and environment, 5 Kyrgyz Members of Parliament and the office of the Prime Minister. During this conference a resolution on sustainable sanitation was agreed by all participants; the benefits of international policy instruments such as the Water & Health Protocol (UNECE/WHO1999) were discussed and a project for up-scaling of WECF UDD school toilets to 20 new schools in Kyrgyzstan was proposed.

Worth mentioning is also the success achieved by Ukrainian partner Vozrojdenie, who conducted a long campaign –also with WECF/ELA support- for restoring the polluted Sasyk bay on the Black Sea. The responsible authorities eventually agreed after years of campaigning; however, the current lack of resources is delaying the actual implementation of the restoration.

International Policy Influencing and Advocacy

International advocacy is an important element of WECF's approach, linking local problems and solutions to international policy and decision-making. WECF empowers its partners to bring their testimonies and lessons learnt to the international arena. Moreover, exposure at such international

events also strengthens their capacities for national level advocacy. Also in the implementation of the MFS1 ELA Programme international advocacy was an important component, in which most ELA partners participated, albeit at a different intensity. Almost all partners participated in the World Water Forum in Istanbul, but in other international advocacy events usually a more limited number of partners took part, which are often the same ones, i.e. partners with the capacity and right experience to contribute to particular side events or drafting processes.

Annex 5 provides an overview of international advocacy events related to the ELA Programme. In most cases the relationship with the ELA programme means that ELA partners presented lessons learned from ELA activities, though the advocacy event was financed by other sources; in some cases the participation of WECF and ELA partners' were ELA (co-)financed. Here a selection of the international events where WECF and (ELA) partners advocated for more sustainable solutions is presented:

- The high level conference at the occasion of the opening of the international year of sanitation in Brussels, January 29, 2008, organized by WECF, with the participation of EC's DG Environment and DG Relex and the Netherlands' Water Ministry and 4 European MPs;
- The joint WECF-UNEP side event for the ministers of the "Network of Women Environmental Ministers and Leaders" during the UNEP governing council meeting (February 2008);
- A seminar in the World Water Week in Stockholm in August 2008, whose 100 participants included His Royal Highness the Prince of Orange;
- Geneva workshop on setting targets and reporting on the UNECE Water & Health Protocol (W&HP), February 2009.
- The Fifth World Water Forum (WWF5), Istanbul, March 2009, where about all ELA partners participated;
- High level conference on sound hazardous waste management, asbestos and POPS, in Astana, Kazakhstan (April, 2009);
- Regional Water Conference, Odessa, Ukraine (October 2009);
- Regional Caucasus Climate high level Conference in Tbilisi, Georgia (November 2009);
- The UNFCCC Climate Conference Copenhagen -COP 15 (December 2009) and preparatory conferences (Bonn, Poznan and Petersburg);
- Fifth Ministerial Conference on Environment and Health, Parma, March 2010, including participation in drafting of the Ministerial Declaration (Andorra, June 2009);
- WECF organized NGO participation in Bucharest, June 2010, on the W&HP and coordinated a workshop;
- Participation in the Stockholm Water Week in 2009 and 2010;
- Asia and Pacific Region Ministerial Conference in Astana, October 2010, on uranium and asbestos mining.

A main result of international advocacy has been more awareness on and attention to water and sanitation problems in EECCA countries and sustainable solutions to redress these within European and international fora. Concrete examples of results are:

- The submission to UNFCCC of a proposal for a simplified CDM mechanism for projects below 5000 ton CO2 (equivalent per year), which should especially be accessible for women and small communities (UNEP event);
- WECF's lobby contributed to the WHO reconsidering the Joint Monitoring Programme's indicators on the acceptable distance to water sources;
- WECF executive director became the in-official co-chair of the UN Water Taskforce on Gender and Water; WECF helped to co-organize an Expert Group Meeting on Gender, Water and Sanitation, bring leading experts on this issues together from around the world. As a result, WECF also co-organised the special session on Gender, Water and Sanitation during WWF5 in Istanbul.

- A major achievement is related to the Parma CEHAPE process, where WECF was invited to participate in the drafting of the ministerial declaration, which –due to WECF's advocacy- now includes the target that all schools in the ECE countries must have proper sanitation by 2020. This also led to a better cooperation of WECF with UNECE, UNDP and WHO Europe.
- WECF's presence and advocacy at Copenhagen (COP15) resulted in the cooperation with EC's DG Relex and EuropeAid within their policy programme on environment, water and climate in Central Asia.
- The WECF Network has become a lead partner in the W&HP process for 2011-2013, which is the first time an NGO is involved. WECF will conduct training of local and national authorities on sustainable sanitation solutions focusing on EECCA countries, Romania and Bulgaria.
- Many WECF partners have become member of the Sustainable Sanitation Alliance Network (SuSanA) which shares information and experiences. WECF is lead of SuSanA's Working Group 7: "Community, Rural and School with gender and social aspects".

Another indicator of the success of WECF and its network consists of the invitation by others to WECF and network partners (e.g. Unison and CAAW from Kyrgyzstan) to speak or otherwise participate at international meetings and events. Examples are invitations of CAAW to present their experiences at the CSD 2009 and the MDG Summit of 2010.

2.7 Sustainability

The ELA Programme has been designed and is implemented in such a way that sustainability (and replication or multiplication) of its results is enhanced, based on lessons learned from previous projects. Factors contributing to sustainability are:

- The wide attention to capacity building of partners and other stakeholders such as beneficiaries and relevant local authorities;
- The focus on involving beneficiaries, local communities and local authorities, in order to create ownership;
- The high priority given to awareness raising on water and sanitation problems and solutions, on hygiene and health issues and on operation and maintenance, rather than only on technical solutions;
- The focus on adjusting technical solutions to local circumstances including the use of locally available materials, whenever possible;
- Documentation of new technical knowledge and experiences in WECF publications and dissemination of these;
- Promotion of information and knowledge becoming available in the local languages of the target countries;
- Attention to capacity building of local craftsmen to enhance the options for replication;
- Information provision and advocacy to others (governments, policy makers, donors, etc.) to attain that successful technical solutions are taken over by others;
- Support to partners for fund raising to expand / replicate the technical solutions; and
- Last but not least, to promote the development of mechanisms which allow replication without project or donor subsidies.

The evaluation exercise led to the conclusion that under the given circumstances very much has been done to ensure sustainability. Still there are challenges that may undermine the sustainability and/or replication potential of the achievements of especially ELA's Programme 1 with the 4 thematic areas. A main factor is the short duration of ELA of only 3 years, which was generally too short to develop and introduce new technologies and also ensure the sustainability of all achievements including initiating a structural process of replication.

In the Open Space meeting of September 2010 and the interviews with the partners the sustainability of and challenges for replication of one specific thematic area was especially discussed, i.e. that of the UDD toilets. Challenges that still need to be addressed include:

- Mentality and attitude of the people towards sanitation, including need for more information;
- In villages where demonstration UDD toilets have been built, many others are interested but wait for NGO subsidies (as they saw others receiving);
- Unavailability of the special UDD seats or slabs and (sometimes) urinals;
- Decentralized sanitation is not a government priority;
- Insufficient local craftsmen and/or building companies have the required technical knowledge and skills;
- Lack of finances among the potential beneficiaries or low priority for spending available finances on sanitation; and
- No good demand yet for eco-sanitation products as farmers are not yet fully convinced and/or lack the knowledge and machinery to distribute larger amounts of urine and/or handle larger amount of faeces.

WECF and their partners are aware of the above challenges and are devising and implementing further strategies to overcome them, though this often requires time. But as mentioned in the previous sections, there are certainly also signals of success. The waiting is now for a tipping point, including a reset of minds, creating a more substantial demand and willingness to pay for ecological sanitation. In some of the target countries this point seems nearer than in others, also boosted by the interest of other donors and/or government to finance ecological sanitation, see Moldova where SDC and the US Embassy are now also (co) financing UDD toilet construction.

For the water supply projects, especially those serving communities, the established water user committees (or involvement of existing ones) is meant to ensure the proper operation and maintenance of the systems. The committee members received proper training, though it is not very clear what back-up mechanisms are in place in case of problems or conflicts.

The development of the energy pilots is still too recent to well assess their sustainability; interest in replication is certainly in place.

Outcome indicators for sustainability

The Monitoring Protocol identified 4 outcome indicators for measuring ELA's sustainability, which are listed below and commented upon. WECF will further report on these indicators in the ELA 2010 annual report.

Indicator 1: Demonstration installations are maintained and continue to be function and properly used. Target is that 80% is still being properly used by the end 2012. Comment: This implies a commitment of WECF and the ELA partners to continue to monitor the installed technologies and established institutions (such as the water committees), even though ELA funding is not available anymore from 2011 onwards. All interviewed partners expressed to be committed to continue monitoring, not just because this is an ELA indicator, but because of their interest in the subjects and because their reputation also depends on the proper functioning of the majority of the installed units.

Indicator 2: Local businesses are producing specific equipment. Target: 9. Comment: There is indeed evidence that partners trained and/or established local business groups that are able to manufacture special equipments (like UDDT seats, doors, solar collectors) and construct the technical sanitation (or energy) solutions. Other partners still plan to do this.

Indicator 3: Citizens have increased health status and reduced health costs from increased knowledge obtained from the project, with as target 5 communities where this has been demonstrated through surveys and studies. Comment: There is anecdotic evidence from a few partners who reported that the

incidence of diseases such as diarrhea has been decreased in communities where health and hygiene education was given and eco-sanitation introduced. However, at present this may be hard to scientifically (i.e. statistically) proof this because the scale at which the new toilets with hand washing have been introduced is still small and most partners did not collect baseline data. WECF and partners are currently implementing a health survey in Central Asia among school children of schools benefiting from UDD toilets and hygiene education.

Indicator 4: Increased participation and responsibility for shaping sustainable future, with as indicator 20 new citizens' organizations created. Comment: As mentioned before, this has not been achieved apart from a few water users' committees and 2 women's groups (by PAROS), because of choosing to work with existing citizens' structures.

2.8 Gender

Next to sustainability, the ELA Programme also aimed at integrating gender in its approaches and interventions; the Monitoring Protocol therefore also includes gender indicators.

When all prospective ELA partners submitted their proposal for the 2009 ELA grants, they were required to also complete a gender questionnaire. This questionnaire requested to explain how the partners would address gender issues and required them to identify gender indicators. Based on the review of a selected number of these questionnaires, the following gender issues were found to be commonly mentioned:

- Involve women in needs identification; special attention to women's issues in WSS;
- Commitment to involve women in the activities as receivers of training and other project benefits;
- Several partners set a target of at least reaching women as 50 % of the active stakeholders (or equal numbers of men and women), have gender balanced committees, involve (also) women in public activities and/or promote their access to information; and
- Several partners aimed to address "practical gender needs" of women / mothers by building toilets, addressing women's role in maintaining toilets or improving water quality (reducing nitrate that is harmful for babies).

However, the partners were never requested to report on the achievements of their own identified gender indicators.

The main gender-related achievement in the overall ELA monitoring was the aggregation by gender of data concerning beneficiaries and (training) participants. All partners indeed did provide gender disaggregated data. These data show that beneficiaries of demonstration projects (toilets, energy installations, etc) consist of equal proportions of men and women. In awareness raising and training workshops the ratio men : women varied per partner and per training subject. For example, several partners had considerably more men than women participating in training workshops on toilet building, some partners had roughly equal participation, but other partners provided this technical training to more women than men. The provision of information and awareness raising (e.g. on hygiene or water) generally attracted more women than men. One partner (CAAW) facilitated an equal decision-making process through the requirement that both husband and wife sign for the toilets.

During most interviews with ELA partners also any gender related achievements during ELA were discussed and most partners could give some examples, generally referring to participation of and/or benefits for women. Based on these interviews and other available information some conclusions can be drawn:

- The more comfortable UDD toilets benefit women and girls especially, since they experienced more inconvenience and health risks using the old pit latrines. The school UDDTs are particularly benefiting girls, especially during their menstruation. The additional cleaning of household

UDDTs –largely but not exclusively by women- seems not to be seen as an additional burden; but the need to regularly spread the urine sometimes is.

- Solar collectors and solar dryers also often benefit women in particular, especially where heating water for washing clothes or dishes, and drying of fruits was a women's task.
- Among the partners there is some general awareness (apparently also due to instructions of WECF) that women should at least equally be targeted for training, beneficiary selection, and/or as members of committees. In practice, women seemed to be more interested in certain subjects, such as hygiene education; in case of actual construction, more men got involved, though not exclusively. Sometimes a more traditional view on women's roles still seems to limit their participation, as in case of a water committee, where the under-representation of women was explained by "*only men can go into the mountain and inspect the water source*".
- Most partners seem to equate gender with women, instead of considering roles and need of men and women and social relations between them, including issues of inequality. Though in many respects women are the ones that need more attention and empowering, since they are often in a disadvantaged position, men should be considered as well. One respondent indeed observed that in future projects more attention to men's problems should go due to their significantly shorter life expectancy –and related health and lifestyle problems- in the EECCA countries.
- Since all attention of WECF, and the ELA team in particular, was required to start up and manage the Programme, more in-depth attention to gender did not get priority; moreover, besides the staff being over-burdened, they were neither well conversant in gender issues.
- It is hard to assess to what extent the ELA programme contributed to achieving MDG3 (equality between men and women). By ensuring that both women and men are participating in project activities, a small step forward seems to have been made.
- At the same time there is more need for reflection on gender issues and for gender expertise among the partners and –to a certain extent- also within WECF. But the MFS2 proposal demonstrates that lessons learned from MFS1, also concerning gender, have been translated by WECF –and its coalition partners- into a more structural approach to gender for this MFS2 Programme.

Gender indicators of the Monitoring Protocol

Most of the above issues are reflected in the five gender indicators of the Monitoring Protocol. The first one (availability of gender disaggregated data) has been largely achieved. For the second and third (reduced burden on women and reduced school absence of girls) there is anecdotic evidence for achieving them, but there is not sufficient systematic data collection yet to assess the extent to which this has been achieved. The health survey among school children, presently being conducted (October 2010), is expected to provide more structural data on the degree girls' absenteeism has actually been reduced at schools that got UDD toilets. The fourth indicator concerns the increased participation of women in project activities, decision-making and leadership functions. The first aspect (women's participation in project activities) seems to have been achieved; but there is not enough information yet available to assess women's increased participation in decision-making and as leaders. The fifth gender indicator refers to the increased gender awareness among partner staff as verified by the integration of gender aspects in reports, publications and advocacy work. In the context of this evaluation, it was impossible to review individual partners' reporting on this, but apparently partners have at least become aware of the need to (also) target women; at the same time there seems room for improvement.

3 Implementing the ELA Programme

After first discussing some miscellaneous aspects of the implementation of the ELA Programme, this chapter will focus on two aspects: monitoring and WECF's network function, including the communication between WECF and partners and among partners.

Sub-granting and WECF's role

The bulk of the ELA activities was implemented through sub-granting to the ELA partners. Hereby WECF required that the partners' proposals would fit under one or several thematic areas of the ELA proposal, including –as mentioned before- at least a sustainable sanitation component. A special feature of WECF's sub-granting is the dynamic partnership in which WECF and its partners actually engage. WECF's role was never limited to sub-granting and related monitoring alone; rather, WECF played an active role in the implementation of the ELA programme by capacity building, suggesting solutions and/or assisting in local adaptations, provision of technical expertise, and facilitating exchange between partners, see also section 3.2. Another distinctive element of WECF's approach is the combination of practical solutions and outreach through awareness raising, policy influencing and lobbying; an approach that was also promoted among the partners.

The sub-granting approach, which included the request for proposals, some support to proposal development, the assessment of the proposals, and the awarding of the grants, was a rather time-consuming exercise in which WECF did not have earlier experience. For both years (2008 and 2009) the whole process could be completed in time. Several of the partners who received a small grant in 2008 (largely due to their relatively weak track record) did not perform sufficiently to be considered for a new grant in 2009. And the total number of partners (32 in year 1) was such that monitoring and support to partners took up more time than anticipated. Still, the sub-granting process went basically well, though lessons have been learned that will enable WECF to improve in future projects.

How ELA evolved

At the start of the ELA Programme the outline of the various sub-components was largely defined, but the exact content still needed to be further elaborated. Looking back, various sub-components of ELA appeared to have evolved differently than foreseen in the original proposal. Two reasons added to this: (1) the fact that annual project proposals from partners were requested through a Call for Proposals, which meant that WECF had less influence on the content of the partners' projects, including their preference for thematic areas; and (2) within ELA, both WECF and partners built upon lessons learned, meaning that successful pilots were followed-up, and less successful dropped. Thus the agricultural component became less robust than foreseen, and also different, more focusing on composting and use of urine, also including the use of human excreta. In contrast, the energy component, still little developed at the start of ELA, became more prominent than expected, especially since 2009 when the first successes were achieved with the solar collectors and dryers. The relatively little detailed ELA concept at the beginning, though not always easy for guiding the project staff, thus provided room for seizing opportunities, which indeed happened.

The ELA team

The ELA project team was relatively small, with a Programme Coordinator and two Programme Assistants based in Europe (Munich and Utrecht) and two field coordinators, one based in Georgia and one in Kyrgyzstan, who also worked for other WECF projects implemented in their region. WECF's technical coordinators on the four thematic areas contributed part-time to technical aspects of the implementation of ELA (e.g. as trainer), as did WECF's executive director and other (administrative) staff. A main challenge was that ELA was WECF's first programme of this size, especially also in terms of

numbers of partners. The evaluator did not spend time on further analyzing ELA's programme management, but during the evaluation it became obvious that the commitment and flexibility of the ELA team, including their eagerness to learn themselves, was an important factor in the overall successful implementation of ELA.

3.1 Monitoring

Progress and output monitoring of achievements by the partners

WECF monitored progress and achievements through 4 main mechanisms:

1. Progress and annual reports by the partners. In 2008 quarterly reports were requested; 3 reports in 2009 and 2 reports in 2010.These progress reports were reviewed by WECF and feedback given;
2. Annual completion of registration forms for 2008, 2009 and 2010 (for outputs), and monitoring tables (for outcomes) in 2010 for 3 years to provide quantitative data;
3. Visits by WECF's field coordinator and/or other ELA team members or technical staff. The field coordinators visited each partner at least twice per year, but many partners more often especially in 2008 and 2009; visits by other ELA team or WECF technical staff depended more on need or usefulness. During partner visits a representative sample of household UDD toilets and all school toilets / energy objects were visited and assessed, and recommendations were given. The field officers provided support to the partners on reporting and project administration. During the visits also training materials and surveys developed by the partners were reviewed and other checks were conducted (such as participant lists).
4. During the visits beneficiaries, who were (randomly) selected from the registration/monitoring sheets, were interviewed using a questionnaire. The collected data is stored in a online database and still has to be analyzed.

In 2008 the Monitoring Protocol was finalized and within WECF the formats for output monitoring (i.e. the registration forms) were developed. These forms reflect the output indicators of the Monitoring Protocol (see Annex 4) and the data needed to complete the form: *Overview created access: users of improved water supply and sanitation.* This latter is required by DGIS to assess created access to WSS for MDG7 applying the criteria by the Joint Monitoring Programme[17] (JMP).

WECF's registration forms collected the following categories of information from the partners:

- numbers and costs of the demonstration projects, including share of costs contributed by the owners;
- numbers of beneficiaries of the demonstration projects and numbers of participants in various categories of training and awareness events (all gender disaggregated); and
- publications and articles prepared by the partner and WECF, including languages in which they were published, number of broadcasts (radio, tv) and number of policy recommendations.

These forms requested considerable details from the partners, such as date, place, duration, title and type of training. Digital pictures were requested of all demonstration projects, such as the UDD toilets, (in this case both of the old and new toilet). Most interviewed partners reported not to have had many problems meeting the monitoring and reporting requirements, though some did struggle to complete the excel tables, especially the first time. Neither the financial reporting was always seen as easy, but the second year many partners did better.

[17] According to the JMP definitions, improved sanitation -such as the UDDTs- replacing (unsafe) pit latrines cannot be counted as new access to sanitation, nor are school toilets counted by JMP, and hence do not officially contribute to achieving the sanitation target of MDG7. WECF opposes this view and has been advocating for the review of the definition of access to sanitation.

The evaluator did not have time to assess the quality of the reporting by individual partners. Apparently standards of reporting varied greatly between partners and there is still room for improvements, even though the 2009 reporting was generally better than that of 2008. Several partners indicated that some form of training or instructions in the first year on this would have been helpful. This would also have been useful in promoting a common understanding among the partners on how to complete the registration forms, in particular, on what to include[18] or exclude in the numbers to be provided.

The monitoring data per partner were aggregated into large overview tables at WECF's office, which were eventually annexed to ELA's annual reports. These overview tables indeed give a good insight in the outputs of the ELA programme and related numbers of beneficiaries, participants and costs. The tables serve well to assess the progress made in achieving the targets for ELA's output indicators, which is a good accomplishment by WECF and ELA partners, even though there is some room for improvements, see the paragraph below.

After having worked with the registration tables for two years now, the staff of the ELA team came across some flaws and other limitations, which largely coincide with the findings of the consultant:

- Several concepts or outputs were not sufficiently defined. The most commonly heard example is that of ToT training, where different partners seem to use different standards for categorizing training as ToT.
- Not all categories are present in the monitoring sheets. Examples are public toilets registered as school toilets, or solar dryers and solar heaters all added up (at least in the overview sheets).
- Average costs calculated for different categories of installations together (especially in case of the energy units) provide little useful information, and rather should have been provided separately per category of installation.
- Some (minor) discrepancies were found in numbers of demonstrations as mentioned in the table and those reported by interviewed partners, apparently caused by misunderstanding, e.g. mixing up the aggregated number of constructed toilets and those constructed in 2009, or including school toilets which construction had not yet been completed. Also this calls for better instructions and/or checking of the data; the latter need also applies to the aggregated tables presenting the overview in which also a few (minor) errors occurred.

Thus also within ELA the classic monitoring dilemma emerged of collecting much monitoring information versus the limited human resources available for processing and checking. Though the above mentioned flaws seem not much to impact the overall totals of ELA's outputs, better definitions, more instructions and better checking should be part of future monitoring. To ensure a good balance between the quantity of the collected monitoring data and WECF's capacity for processing, the collection of data should be limited to those data that are needed for the official output indicators, selected parameters for outcome and impact, and to give WECF sufficient insight in the partners' overall performance. Requesting partners to identify indicators, as in the gender questionnaire, without following up on these, should be avoided.

Outcome and impact monitoring of achievements by the partners

In 2008 and 2009 no structural outcome or impact monitoring was conducted[19], which is indeed a common approach since the aimed for changes resulting from activities and delivered outputs often only crystallize and become well visible towards the end of a project or programme. At the time of this evaluation, WECF had distributed monitoring sheets to the ELA partners to collect information on the outcome indicators. At the time of writing the final draft of this evaluation report the data are still being

[18] E.g.: a few partners initially provided total numbers of UUDTs which included toilets constructed financed by other projects.
[19] Though it was discussed during the annual Open Space Meetings

processed and analyzed. The ELA annual report for 2010 will discuss the findings of the outcome monitoring. Below only some comments on the monitoring forms are given.

The ELA outcome monitoring focuses on the actual use of the demonstration units and the perception of the beneficiaries (satisfaction, etc). The questions in the monitoring forms are all relevant for assessing the extent the outcome indicators' targets have been achieved, but the design of the questionnaire, such as the wording of some questions, could have been more accurate. An example is the question on whether hand washing facilities are available, functioning and used, with the option *yes* or *no* as answers. It remains unclear what to answer if the facilities are available and functioning, but not (always) used.

Since the ELA programme should not be judged on the achievements of the ELA financed demonstrations alone, but also on the spin-off it has in terms of replication by others, it would have been helpful if WECF had more structurally collected and recorded information on replications by others (either by other donors or self-financed) rather than the anecdotic evidence or raw data that is presently available. The monitoring forms include questions on the willingness to invest in sustainable energy systems, but hard information on actual replications (also of UDD toilets and other WECF promoted technologies) would have been more convincing of WECF's success.

Information on impact, such as on poverty or health improvements, is yet hardly available, except for some anecdotal evidence by some partners. The health survey that is currently conducted in several Central Asian countries to assess the health effects of school sanitation is an example of an effort to address this absence of impact information. Though the limited scale of the demonstrations not always facilitate easy impact assessments (nor the short duration of ELA of 3 years), more attention to structurally measuring impact is vital to justify the (continuation of) the demonstration projects.

Two specific monitoring systems

WECF has recently started two specific monitoring systems: one for household UDD toilets and one for school toilets and nitrate levels. The first one is a database in which WECF staff, after visiting constructed and functioning households UDDTs, fill in a broad range of information related to the various aspects of the toilet, including user satisfaction, technical problems, use of ecosan products, and interest of neighbours. This database is not accessible for the general public, but forms a good database for analyzing the use of UDD toilets. The second one, the ToNi-finder, is a map that illustrates where sustainable (i.e. UDDT) school toilets have been built and presents nitrate levels of ground water, surface water and/or drinking water. The latter is accessible via WECF's website: http://www.wecf.eu/english/campaigns/2009/toni-finder.php.

Monitoring of activities implemented more directly by WECF

The bulk of the monitoring data concerns information on activities, outputs and/or outcomes implemented or achieved by the ELA partners. As mentioned before, there are also ELA activities which are directly implemented by WECF. The 2008 and 2009 annual reports on ELA did also report on these, e.g. by mentioning in the text the main achievements regarding international advocacy and adding a list of WECF publications for the partners. At present, information on such individual WECF activities can be found at their website, which is very useful, but does not present a clear overview of e.g. all advocacy or all publications that were implemented under the ELA umbrella. It therefore appears that a more structural way of monitoring -or rather recording- of these data would be helpful to get a quick overview whenever necessary.

3.2 WECF: communication with ELA partners and as a network organization

Communication between WECF and the ELA partners

All interviewed partners were very positive on the communication with WECF, in particular with the ELA team. All agreed that WECF was always easy to contact and access to the staff was easy, not in the last place because it was possible to communicate in Russian with several members of the ELA team. The positive and constructive feedback, also in case of any problems, was well appreciated. Comments were given as "*it is like working with someone familiar: same purpose and same goal"* and "*WECF expertise is always easy to get".* All also appreciated the training and field visits by the ELA staff. The problems in communication were few; if any problems, they were usually due to external conditions (e.g. in case of the partner from Uzbekistan) or due to budget limitations (one partner hoped for WECF co-financing for another project, which eventually became not available).

The deliberate choice of WECF to have Russian speaking staff, to have own technical staff with much practical knowledge and expertise[20], to base two field coordinators in the EECCA region and to provide technical capacity building for the partners, seem all factors that have positively contributed to the success of the ELA Programme.

The WECF Network

During ELA the structure of WECF as a network organization was often capitalized upon. Main examples:

- Training of partners always involved staff members of a number of ELA partners together, which allowed exchange of information and ideas;
- Various exchange visits between partners were organized, in particular where one partner could learn from the expertise and experience of another partner;
- Annual Open Space conferences were organized for all ELA partners (and other WECF partners working on similar topics) which encouraged the sharing of lessons learned;
- In a few partner countries the WECF ELA partners have started cooperation among themselves, reducing the need for WECF's role as a facilitator. This apparently works best in Georgia;
- There is now a common news serve list, called INTERA, through which ELA partners (and WECF staff) can exchange information especially on sustainable sanitation.
- A blog called "ELA meeting room" was launched for the ELA program, but this was not very successful because partners do not have either time or good internet connection (or both factors) to be active. Also the WECF ELA team did not have enough capacities to maintain the blog.
- In 2009 there was an "ELA newsletter" sent whenever there was news (mixed in English and Russian).

The interviewed partners were asked about the importance of the WECF network for themselves. On this subject again all agreed that the WECF network benefited them very much. Comments were made such as:

- The network was very important; now I know the other partners, it is easy to contact them;
- We benefited very much from the network, especially through information and knowledge sharing, including WECF's approach of practical technical stuff next to lobby work;

[20]The departure of WECF's agricultural expert in the beginning of the ELA programme and the fact that her successor –for several reasons, partly beyond her control- never became fully involved in ELA may have contributed to the agricultural component not becoming as substantial as foreseen.

- I benefited much from the exchange visit to Ukraine, and from the Kyrgyz partner who visited and advised us;
- WECF and its network is becoming a knowledge based NGO!
- We learned the solution for the freezing problem (of UDDTs) from another Georgian partner, and another partner advised us on agriculture, thus the network is very useful;
- I made even friends, I am daily in contact with other ELA partners, including asking advice, the network is the best plus of the ELA programme!

There is not much to add to the above quotes: the network structure of WECF indeed formed a great added value for the partners. Several partners spontaneously mentioned that they hope that also after the ELA programme has been completed, the network remains active.

4 Recommendations

1. Though there were also some advantages in working with little experienced partners, it is recommended to be stricter in partner selection in future projects, ensuring that their role in new projects is better in line with their strengths. WECF is aware of this and made efforts to apply this in recent proposals. The added value of partners working together and –potentially- forming local coalitions plays also a role here and is acknowledged by WECF.

2. The momentum achieved by the ELA Programme should be maintained as much as possible to ensure that the still remaining challenges for further acceptation and replications –in terms of technical, attitude and/or legal limitations- can be overcome. The scale at which this can be done will depend on other project / programme funding (secured already for several ELA countries), but a minimum scenario has to be developed for partners or countries for which no funding has (yet) become available.

3. The minimum scenario should at least include maintaining the network (e.g. through Intera) and a continued minimum level of monitoring of the ELA demonstration units to ensure their proper use (e.g. of UDDTs and solar units) and functioning (of e.g. water committees) in the near future and to continue learning lessons. This is also in line with the first ELA sustainability outcome indicator, which refers to 2012. This should be linked with continued efforts for replication.

4. In the thematic area of sanitation, though most ELA countries demonstrated a good level of (local) acceptance and satisfaction, several challenges remain to be better addressed. Though these vary from country to country, the proper use of ecosan products, especially human faeces and larger scale use of urine, are common issues requiring continued attention, as well as the legal, institutional and practical barriers for their use. WECF already promotes a change in mindset to make the use of “humanure” a service to farmers, rather than seeing their disposal as a burden.

5. Another challenge to be overcome is to attain the willingness of individuals, who are in principle interested in the UDD toilets, to pay for the full investment costs. This can be achieved by reducing -as much as possible- the provision of subsidies to new demonstration household toilets, since this sets precedents to others, and instead build demonstration toilets in more neutral places, e.g. in public offices. In addition, financing mechanisms should be further developed, which can be based on first experiences of some of the ELA partners.

6. Continued attention to construction capacity of the sustainable sanitation solutions, including local availability of the needed materials (such as the UDD seats or urinals) is also crucial. Here also the first experiences of several ELA partners should be further spread or developed and solutions for common problems –such as UDD squatting toilets build exclusively of locally available materials- should (continue to) be shared.

7. With the target of 100% proper school sanitation adopted by the CEHAPE Ministerial Conference, the UDD solution for schools in rural areas without water supply or sewage systems should be promoted through (continued) advocacy, also addressing the Ministries of Education at and SES at especially oblast levels, and –as already done to some extent- donors funding educational programmes.

8. Regarding the thematic area of water, it is recommended to –even more- focus on innovative solutions and/or the sustainable and participatory management of (drinking) water sources and

systems, including awareness raising and behavioural change, rather than actually (only) implementing the construction of water sources or supply systems. Continued work with the Water Safety Plans, creating awareness on water quality, demonstrating low costs solutions as rain water harvesting, and lobbying for better access to safe water seem niche areas for WECF and partners.

9. The energy demonstrations, often combined with sanitation, though being rather recent, are very promising and hence continued attention to better enable replications is also essential for this thematic area. Combining energy projects (water heating) with sanitation has also the potential to increase people's interest in UDD toilets.

10. In future projects or programmes WECF should consider more capacity building sessions of partners not only on technical subjects (including health and environmental concepts), but also on project management issues, even though some management support was given during ELA (mostly "on the job" and ad hoc). But a more structured approach should be followed, based on a needs inventory. Training or capacity building on incorporating gender perspectives in needs assessments and on gender based barriers for women's participation should be integrated in such training programmes. At the same time, training needs for WECF staff, especially related programme management and possibly gender, should also be considered and addressed.

11. Some partners have broad advocacy experience and expertise, whether others have little or no experience. Considering the nature of WECF's projects, advocacy –in its various forms- is a key factor in promoting further adoption and/or replication of its innovative solutions. Therefore capacity building of partners in advocacy and policy influencing should be given more attention, again based on identified needs, and also making use of exchanging experiences with partners that are well experienced in advocacy. Ensuring coordination on national level advocacy by promoting national level alliances of WECF partners of a same country (partly already done) and possibly other relevant stakeholders will add to a more structural approach of policy influencing.

12. In the monitoring of project outputs and outcomes, there is a need for better definitions and joint understanding of used concepts and categories. Monitoring tables should better allow reporting on different categories of demonstrations, to avoid getting totals and average costs of different installations. Questions in monitoring forms or surveys should not give room for ambiguous interpretations, and –in case of pre-coded answers- should include all answer options, including answers as "not applicable" or "do not know", if applicable. Monitoring data should be double checked to identify possible mistakes.

13. Only monitoring data should be collected that can be properly processed and that serve a purpose; it will be a challenge to find a good balance here, also in view of the staff time available to work on monitoring. At the same time, some more attention should be given to data or information collection on results and spin-offs, in case of ELA on the effects of the demonstration project, the capacity building and democracy programmes. In practical terms this might consists of better (case) studies, including baseline data, on the poverty and health impacts of demonstrations such as the renewable energy pilots. Since a "raison d'être" of ELA is to achieve replications, also such data should be collected: both on replications subsidized by other donors and for which the ELA partners usually provided the "software" (training and awareness raising), as well as on replications that are copies by individuals or institutions without donor funding and/or ELA partner involvement[21]. Though it may be harder to find complete data on the latter, it is crucial that WECF can provide information to donors and other

[21] WECF reported that in the outcome monitoring of end 2010 also some information was collected on replications, which is commendable. As this information was not yet fully processed at the time this report was finalized, it could not yet be assessed.

interested parties on the extent that replications have been achieved of the solutions introduced and promoted by ELA (or other similar WECF Programmes).

14. There is apparent room for improvement in the recording of certain monitoring data on activities directly implemented by WECF, i.e. not through its partners, such as on WECF publications, participation in (international) events and press releases / coverage. Much of this information is now found at WECF's website, but a more structural recording, e.g. in excel tables, seems desirable to allow a quicker and more complete retrieval of such data.

15. WECF should also report more structurally on achievements and results and not only on projects or activities implemented. For example, WECF's website has two categories of projects: ongoing ones and past projects. Whenever a project has been completed and is moved to the category "past projects" an item on "results achieved" could be added, summarizing the main achievements of the project.