GPAF-IMP-085

Food security through increased access to water and food production in Kenya.

Final Evaluation



With parents who build dams, and more time to play – the builders of the future are learning.

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7th November 2016

Table of Contents

SET	SETTING THE SCENE3				
ACI	RONYMS AND ABBREVIATIONS	4			
1.	EXECUTIVE SUMMARY	5			
2.	INTRODUCTION	7			
2.1	Purpose of the evaluation	7			
2.2	Organisation context				
2.3	Logic and assumptions of the evaluation	11			
2.4	Overview of GPAF funded activities	12			
3.	EVALUATION METHODOLOGY	13			
4.	FINDINGS	14			
4.1	Overall Results	14			
4.2	Assessment of accuracy of reported results	17			
4.3	Relevance	23			
4.4	Effectiveness	28			
4.5	Efficiency	31			
4.6	Sustainability	32			
4.7	Impact	33			
5	CONCLUSIONS	38			
5.1	Summary of achievements against evaluation questions	38			
5.2	Summary of achievements against rationale for GPAF funding and value for money	39			
5.	LESSONS LEARNT	40			
6.1	Project level	40			
6.2	Policy level	40			
6.3	Sector level	40			
6.4	GPAF management	40			
6.	RECOMMENDATIONS	41			
7.1	For ASDF.				
7.2	For ED:				
7.3	For DfID:	41			
ııc.	T OF ANNEYES	42			

Setting the scene

The Watuka SHG has only 20 members. Twenty of the original 40 members have left as they were not able to commit the time required to participate in the many activities of their group — "the work was too much". There are all the training sessions to attend, terracing to be done, a tree nursery and vegetable garden to be established and cared for, and meetings to be present for in between doing your own household and farming work.

But on top of all of this the twenty remaining members have built three sand dams in three years. Sand dams are not small and they are not built of sand. The wall is built of concrete and will trap sand behind it. The sand stores the water, filters it, and keeps it safe from evaporation and contamination. A sand dam can use anywhere between 100 and 1,000 bags of cement depending on its size. ASDF determines a good site and designs a dam that will last. It provides the cement and tools with an artisan to oversee the work. But it is the 20 members of the group who spend one day each week for three months collecting local materials ie sand, stone and water before starting construction of each dam. With hammers they crush stone into ballast to be mixed with the cement. The materials have to be carried for great distances, often kilometres. It is back-breaking work.

For the two weeks of construction the group members are on site all day, five days a week. They provide all the labour required. They dig the trench down to the bedrock for the foundation. They mix, carry and pour the concrete and lay the large rocks to build the wall that will last at least 50 years. There is no difference in the work done by men and that done by women, everyone does whatever is needed to be done. The women are proud of their new skills in mixing cement and making concrete. They are already putting it to good use in their own homesteads.

In the Watuka group all of this has been done by it's 20 members— three times over — one dam each year for three years — all without pay — an investment in their future. They are not alone. The DfID grant has supported 20 groups of different sizes. Between them all they have built 62 sand dams during the project. Most of them are starting to enjoy the fruits of their enormous investment. The many hours they spent carrying water in the past can now be used to tend to their families and improve their lives. Their vegetable and fruit tree gardens are starting to flourish. They can afford the time and the money for their children to fully attend school. A few, who too have made the investment but whose dams are newly built and not yet filled with sand, await the rains to bring sand and water to fill the dams — as they walk now for hours to fetch water every day they look forward to how different their lives are going to be.



Watuka SHG Sand Dam

Acronyms and abbreviations

Acronym	Explanation
ASDF	African Sand Dam Foundation
DfID	Department for International Development
DR	Drought reisitant
ED	Excellent Development
GPAF	Global Poverty Action Fund
НН	Households
MDG	Millennium Development Goals
NDMA	National Drought Management Authority
OECD-DAC	Organisation for Economic Co-operation and Development – Development Assistance Committee
SHG	Self-help group
The project	Food security through increased access to water and food production in Kenya
ToR	Terms of reference.
WASH	Water sanitation and hygiene.
WRMA	Water Resource Management Authority

1. Executive Summary

The name 'Food security through increased access to water and food production in Kenya' describes the purpose of the project funded by DfID GPAF programme. The funding is administered and reported on by Excellent Development (ED) and implemented by their strategic partner Africa Sand Dam Foundation (ASDF) in Makueni County in Kenya.

This is the final evaluation of the three-year project that ended in October 2016 which set out to support 20 Self Help Groups (SHGs) to build 62 sand dams. Though the final numbers and third year report are not yet in, this evaluation confirms that the successful achievement of targets, reported for the first two years of the programme, have continued. By the end of the project 21 SHGs have been supported and 62 dams have been completed on time.

While this is a remarkable achievement in itself, the supported SHGs have achieved much more than participating in the construction of sand dams. They have been the organisational structure that has coordinated and brought together the support provided by the project with the efforts of men and women farmers. They have not only maximised the benefits from the improved and sustainable water supplies, but have gone on to improve agricultural production, nutrition and income within their communities.

The evaluation provided an opportunity to independently verify the record of achievement and to draw learning from it. This evaluation comes at the point of completion of a project that will, by its very nature, achieve its full impact over years to come. Despite this there is compelling evidence that the combination of services and resources provided through the project have already started having the beginnings of the expected benefits to the intended beneficiaries. The evaluation found that this has been a very successful project in applying the OECD-DAC criteria of relevance, effectiveness, efficiency, sustainability and impact. It is the finding of this evaluation that the project has provided particularly good value for money. At the outset of the evaluation this was not to be expected from a project that had set such ambitious targets.

Beyond the need to verify achievement, the conclusions of the evaluation draw learning and insight from a story of success. It has learned that ASDF has an important combination of values, approach, skills and a more difficult to define "attitude". The values centre around a strong belief that being paid to work on your own development undermines the benefit of development interventions. Technical sand dam building and agricultural knowledge and skills are combined with high level project management skills used to build ongoing learning. Well supported field officers do the difficult work of facilitating community members to work together effectively and efficiently without payment in SHGs. This approach has played a crucial role in the success of the project.

Revealing this "attitude" of ASDF was one of the unexpected findings of the evaluation. It started when we were trying to understand why SHGs were choosing to work with ASDF when there are other NGOs they know who pay for the kind of hard work that they had committed to do without pay. We put this question to SHG members directly. The answers were unexpected. The words most commonly used to explain were they choose ASDF because they are 'serious', 'focused', and 'transparent'. There is a kind of rigour, determination and even a toughness in ASDFs approach that is appreciated.

Another unexpected benefit was attaining skills in "time management". A number of times in interviews 'time management' was mentioned (completely unprompted) by individual members as one of the most valued benefits. In probing behind these responses it became clear that what is being experienced by individual community members is an increase in the sense of being able to initiate and complete tasks and initiatives previously considered beyond them. This growth in personal sense of agency reflects more than increased knowledge through effective training. It suggests a significant shift in an individual's relationship to life, a move away from being a dependent victim to being an active participant in, even an initiator of change.

The final conclusions and learning of the evaluation highlights two things. Firstly, the importance of understanding how to maximise the positive contribution and long-term impact of short-term project-driven results-based interventions. Secondly, how to minimise the danger that the steep demands of delivering on short term 'value for money' objectives may extract so much value from the implementing organisation and the community members who do the work that they end up impoverished and unable to thrive.

The recommendations of this evaluation encourage ED and ASDF to appreciate the substantial success they have achieved through their partnership. It is proposed that they must use their success to inform their ongoing learning. The evaluation challenges them to not only continue developing their effective project delivery, but also to take a lead in promoting effective development that seeks alternatives to societal systems that impoverish. DfID is encouraged to use this project as a case study when engaging the hoary old issue of payment for work.

2. Introduction

2.1 Purpose of the evaluation

The 'Food Security through Increased Access to Water and Food Production in Kenya' project (hereafter referred to as 'the project') is administered and reported on by Excellent Development (ED) who receive funds from the Department for International Development UK (DfID) to support the work of their implementation partner Africa Sand Dam Foundation (ASDF). ASDF in its turn supports local Self Help Groups (SHGs) in (mostly) deeply rural semi-arid farming villages in Makueni County, Kenya. These SHGs have members and elect committees. The ultimate intended beneficiaries are the members, their families and the communities in which they live. These are the essential organisational elements that have come together to deliver on the common intended outcome of: "male and female smallholder farmers in Makueni County benefitting from improved and sustainable water supplies, agricultural production, nutrition and income."

The stated purpose of the evaluation (as per the Terms of Reference) is "the independent final evaluation reports will be used to inform the Fund Manager's understanding of the grantees performance at the project level and will also be used to inform the Evaluation Manager's assessment of performance at GPAF fund level"

A key aspect of the evaluation must be to evaluate the project's value for money by looking at the following questions:

- Independently verify (and supplement where necessary) the grantee's record of achievement as reported through project annual reports and LogFrame.
- Assess the extent to which the project has performed well and was good value for money.

Emphasising learning in the purpose of evaluation.

In addition to verifying achievements and assessing value for money, the evaluators bring a specific emphasis to drawing learning. In tendering for the work we described the approach we bring to evaluation as follows:

We seek to contribute to both learning and accountability that is useful for the intended beneficiaries, the implementing agency and the funder, as well as for the relationships between them. We understand development to be an ongoing process of learning. We gauge the value of an evaluation in the extent to which the learning is used to develop relationships and practices that improve the chances of achieving long term sustainable and developmental impact.

Looking for deeper impact.

When looking for impact we look for how the delivery of the service has contributed to shifting relationships from dependency towards independence and ultimately inter-dependence. We look

for these developments in relationships between individuals, in organisations and communities, and between communities and those who serve them.

We approach the evaluation of developmental impact through an ecological/living systems understanding of the world. We understand the need to 'eradicate extreme (human) poverty' (MDG1) and the need to 'ensure environmental sustainability' (MDG7) as evidence of human interventions into living systems that have undermined their innate ability to flourish. From ecological systems we learn that the ability to flourish relies on healthy relationships of interdependence between all the elements of the system required to sustain life. From the process of impoverishing human systems and individuals we learn that human development progresses from a phase of dependency through a constant striving for independence against the foundation reality of the interdependence of all life. Poverty occurs when a part of an interdependent living system gets trapped in relationships of dysfunctional dependency — unable to get from the system what is needed to flourish — and unable to contribute from its full productive potential.

In evaluating developmental interventions we take a relational view. In looking for the deeper impact of development interventions we are looking for changes in the nature and quality of relationships over time from dysfunctional dependency through the learning derived from striving for independence always towards healthy, life promoting, inter-dependence.

2.2 Organisation context

In this section two aspects of context will be addressed. Firstly, a very brief overview of critical elements of the broader societal and national context that contribute to shaping the project will be provided. Secondly the organisational context that directly shapes the work of ED and ASDF will be sketched out.

2.2.1 MDGs and climate change.

This project is a part of the global priority of eradicating extreme poverty and hunger and ensuring environmental sustainability as reflected in the MDGs in a time of climate change. It operates in Makueni County located in the southern part of Eastern Kenya, that borders on Kitui to the East, Taita Taveta to the South, Kajiado to the West and Machakos to the North. Its covers an area of 8008.8 km² of semi-arid land and is comprised of 9 sub-counties.

Rainfall is low at 150-250mm pa. There are two rainy seasons, short rains from Oct-Dec and long rains from Mar – May. Temperatures rise to 31^c. According to ASDF reports the area has an estimated population of 884,527 (49% Male and 51% female) with a population density of 113 people/Km2. The average household size is 5 people. The main economic activities are subsistence agriculture, livestock farming and bee keeping.

According to the Kenya Government National Drought Management Authority (NDMA) drought early warning bulletin for Aug 2016 – Makueni County in the current dry season was expected to be hot & sunny with no rain. Most surface water such as dams dry up, causing reduced household and faming access to water. The rainfall has been erratic since 2011 due to climate change. Water shortage is the main cause of hunger and poverty as it causes women and children to spend up to 6hrs/day collecting water during driest spells. This lack of water results in the inability to engage in food production and other economic activities.

2.2.2 Devolution of powers.

The promulgation of the Constitution of Kenya in 2010 marked a major change in the way the country is governed. It brought government closer to the people, with county governments at the centre of dispersing political power and economic resources to Kenyans at the grassroots. As part of this implementation of devolved government following the 2013 General Election, the Makueni County Government and Senate were established. The dispersal of political power and economic resources has moved from the centre in Nairobi to become the responsibility of the Makueni County Government. Two Ministries have a direct bearing on the project: i) the Ministry of Water, Irrigation and Environment, and ii) the Ministry of Agriculture, Livestock and Fisheries.

2.2.3 Economic developments.

The following significant contributors to future economic development were encountered on the ground. A short walk from ASDF's office a vast railway station complex is nearing completion. Kenya Railways Corporation is developing a new standard gauge railway (SGR) line for passengers and cargo transportation between Mombasa and Nairobi. The new line passes from the port in Mombasa, through Nairobi to Uganda, Rwanda and South Sudan. It has been built through Makueni County and will ultimately connect Makueni to these far-away places. The Mombasa-Nairobi phase of the project is scheduled to be completed by December 2017 at a cost KES327bn (\$3.8bn). The building of this mega-project has received mixed responses from those directly affected in Makueni County. Land acquisition for the railway has been enforced and inadequately compensated. The railway now has become an impenetrable barrier that divides communities. The massive scale of largely unregulated sand harvesting for construction from dry ephemeral river beds is reducing the ability of these rivers to i) slow down flash flood run-off in the rains, and ii) store adequate amounts of water through the dry season. The impact on the future economy of the region is bound to be substantial.

Makueni County Government has embarked on building the Kalamba Fruit Processing Plant for citrus, mangoes and avocado. Construction is nearing completion. We met government officials in the field doing preparatory research into potential fruit suppliers for the processing plant. Their primary focus was on small-scale producers. The tree nurseries of the SHGs we visited indicated that they knew of and are keenly interested in this new opportunity for growing and marketing a cash crop.

In a country where infrastructure development is booming and is a valuable and sought-after resource, sand harvesting is both a threat and opportunity to those constructing sand dams. Since the promulgation of the Sand Harvesting and Utilisation Bill of 2015 by the County Government there is a threat that SHGs may lose control and ownership of the sand in the dams they have built. This raises tensions between the newly formed County Government that is issuing permits for commercial sand harvesting, and the rights and protection provided when

SHGs register their dams with the national Water Resources Management Authority (WRMA).

Road systems and transport into previously isolated communities is improving. Through improvement in transport, in particular the exponential growth in motorcycle taxis known as *boda-bodas*, marketing of agricultural produce is becoming increasingly viable.

2.2.4 Devolution and accountability in international development.

This evaluation takes place at a time when there are significant ongoing shifts in the dynamics that have shaped the international development aid industry for perhaps the past seventy years. Global dispersal of political power and economic resources are also shifting. Established development relationships and funding flows between nations like the UK and recipient countries like Kenya continue to develop and shift over time. It is in the relationships between institutional donors, international NGOs, local NGOs and the ultimate targeted beneficiaries that there is some evidence of devolution. There is a strong impulse to devolve the responsibility for development from the centre to those closest to the need for it. From international agencies and organisations being the agents of development there has long been a shift to devolving this responsibility to local development partner organisations. There is a growing trend to look for ways of shortening the "aid chain". Through its approach, ASDF in its turn shifts much of the responsibility and investment for development to SHGs and their members.

2.2.5 Organisational context of the project under evaluation.

The evaluation also takes place at a time when results-based management practices and planning, monitoring and evaluation methods are well established as the primary means of communication between links in the aid chain. As a result, they are central to shaping the practices, flows of information, resources, and the power dynamics that characterise the interdependent system responsible for delivering the results of the project. The organisations in the chain that we are evaluating a part of includes DfID, two consultancy agencies engaged by DfID to manage the contract (Triple Line Consulting in year 1 and Mannion Daniels in year 2), ED, ASDF, and 20 SHGs.

The evaluation focuses on the final delivery end of the chain between ASDF the SHGs and the members. Above ASDF is a longstanding relationship with ED that has been a very close partnership. This partnership has developed through a number of stages from establishing ED Kenya together, to separating to form ASDF in Kenya and ED based in the UK. Initially ASDF was

wholly dependent on funds raised by ED, and EDs only partner was ASDF. While remaining close, from this state of mutual dependency there is rapid development towards independence and new forms of inter-dependence. ED now has relationships with other partners and uses ASDF as expert consultant for initiatives in other parts of the world. ASDF has developed in their competence to establish and grow funding relationships independent of ED. Funding raised by ED now makes up around 53% of ASDF's total budget.

This shift to increased independence and ultimately inter-dependence is also detectable in the relationships between ASDF and the SHGs. The majority of SHGs existed and were providing services to their members before seeking out ASDF for support. It is calculated that SHGs contribute around half of the real cost of sand dams and shallow wells though their labour and collection of local materials. Although still in its infancy there is already evidence that the Table Banks (banks run by SHGs though which loans are made to members and interest is charged), the sale of water, the services of bulls and billy goats, and income generated from group vegetable gardens is establishing a locally generated fund for individual and group development needs.

2.3 Logic and assumptions of the evaluation

The OECD-DAC standard of applying criteria of relevance, effectiveness, efficiency, sustainability and impact were used in the evaluation. In addition to this, the following logic and assumptions have contributed to shaping the design and implementation of the evaluation:

- Eradicating extreme poverty and hunger (MDG 1) and ensuring environmental sustainability (MDG 7) have become global priorities. Evaluations like this are an opportunity to contribute to building an understanding of, and addressing their systemic causes.
- Despite an ever increasing emphasis on and investment in planning monitoring and reporting systems, on their own these systems cannot be relied on to establish trust.
- We have learned that resource users themselves are best placed to comment on the value of interventions affecting them. We differentiated our focus on women, men and youth.
- After decades of development aid there are deeply entrenched power relations and learned ways of relating between actors. For evaluation purposes it is both crucial and difficult to build a quality of relationship to reveal the deeper impact of collective efforts.
- High levels of participation by those evaluated increase ownership and learning.
- Having received high ratings in feedback from DFID's management agents to the reported
 activities and achievements of the first two years it was assumed that ASDF is a competent
 and effective organisation.
- The primary focus of the evaluation was on delivery and results to ultimate beneficiaries, and not on the development of the organisations involved in the process. Where possible the latter outcome of development interventions was explored and taken into consideration.

2.4 Overview of GPAF funded activities

DFID funded ED/ASDF under the GPAF 3-year project 2013-16 to support 20 Self Help Groups and the construction of 62 sand dams, with the overall aim to improve food security for communities in Makueni County. The project specifically seeks to improve the food security of 5,427 people through increased access to water and food production in the county by:

- Reducing time/distance used to collect water,
- Improving food production, and
- Improving health & nutrition.

The project also seeks to contribute to the decline of poverty and work towards the achievement of MDGs 1 and 7 (including the 2015 SDGs introduced mid-project).

The project outputs and key activities as stated in the Evaluation TOR and Log-frame are summarized below:

Table 1 Project output to activity

	Output	Activity	Weighting
1.	Communities in Makueni County have access to new/improved water sources	62 Sand dams constructed	45%
2.	Male and female farmers in Makueni County are practicing soil and water conservation and improved agricultural techniques on their farms	700 SHG members trained in practicing soil and water conservation methods on farms	25%
3.	Male and female farmers in Makueni County are diversifying crops and experiencing increased food production	700 SHG members engaged and trained in a variety of sustainable agricultural methods Inc. Planting drought tolerant crop varieties, and establishing seed banks	20%
4.	Male and female farmers in Makueni County are practicing improved livestock management techniques	12 livestock projects implemented; cattle, goat and fish farms	5%
5.	SHGs have strengthened organisational capacity in governance, leadership and planning and are integrated in local government extension mechanisms	20 SHGs' capacity built in issues such as governance, leadership, and bookkeeping	5%

Key project assumptions as stated in the project Log-frame are:

- Severe drought conditions do not occur and cause emergency-level food shortages in Makueni County
- 62 dams constructed x 355 people served per sand dam = 22,010 target population
- Average SHG membership of 45 farmers (30% men; 70% women) based on ASDF estimation
- 100% of farmers choose to diversify crop variety (by 50% or more) and use improved seed varieties
- 60% of SHG's establish a vegetable plot
- No prolonged drought in Makueni that kills cattle & goats, or disables fish farming
- SHG's adopt lessons learned from community workshops

3. Evaluation Methodology

Evaluation plan

The evaluation was designed to combine participatory, learning, and qualitative results-focused elements with external verification of quantifiable results. The qualitative information was gathered through i) group and in-depth interviews and engagement through conversation, and ii) accompanied visits to sites with SHG member, ASDF staff and other key informants (chief and sub-chiefs, NGOs in the area, and WRMA staff). Quantitative data collection involved the review, verification and analysis of data provided in the project reports and source documents.

The evaluation design included the following essential components:

- Survey of documents
 Review of project documents including documented evidence of activities as specified in TOR section 2.2. (see annex 5 for documents read)
- In country field visit (10 working days in the field excluding travel see annex 6 for schedule)
 - Workshop with project staff to brief them, gain first hand insight into project, and include them in adding questions of importance to inform their learning.
 - Selection of sample of 8 project sites to be visited applying criteria of geographic spread over area covered, range of effectiveness of SHGs (including examples of stronger and weaker groups), logistically possible given time available, distances and logistics.
 - Viewing (and photographing) of source documentary evidence of dams and SHGs including permits, registrations etc., and evidence of delivery of and participation in services rendered.
 - Working evaluation questions provided in TOR and by project staff into themes to be explored in depth through engagement with staff and SHG members and

through direct observation on field visits. A set of thematic areas of questioning was developed as a field guide that was adapted as the picture emerged and themes developed.

- ➤ Field observations of sand dams, shallow wells, mixed/vegetable farming, soil/water conservation/terracing, livestock, tree nurseries and planting combined with interviews of project beneficiaries. The contact time of each visit was between 2 and 4 hours.
- In-depth interviews with ASDF staff, chief, WRMA, and Red Cross. Two interviews with Ministers of County Government were arranged but the interviewees did not arrive.
- Final ASDF staff workshop for feedback and processing of preliminary findings.
- Processing and presentation of findings.
- Analysis and processing of information and preparation of report.

Strengths and weaknesses of selected design and research methods

The greatest strength of the design was the ability to spend time with the ultimate beneficiaries and implementers in a sample of the communities where the project work was done. This provided the opportunity not only to observe and verify the outputs and outcomes of the project, but to understand and learn about what it took to achieve them and what lies behind the more obvious and expected. The greatest weakness of the evaluation is that it focused on only one end of the "chain". The success of the project is dependent on a chain of relationships from DfID through its managing agents to ED and ASDF and ultimately to the SHGs and ultimate beneficiaries. The evaluation was designed to focus only on the final delivery end and therefore cannot contribute any learning on the vital contributions made by the other links in the chain.

Summary of problems and issues encountered

The evaluation process was well supported by the staff of ASDF despite the fact that they were not fully involved in the design and planning of it. The staff directly involved in making it possible on the ground had not seen the TOR so could not plan before the process began. The only other limitation is that the final evaluation took place before the final project report was written. It was therefore difficult to verify the very final reported results.

4. Findings

4.1 Overall Results

Using the weighting provided in the TOR (see section 2.2) against project targets and achievements an overall score of 85.8% has been arrived at. See table 2 below. Consideration was given to the project operating environment especially the current dry season, community and staff feedback, and direct field observation.

Overall, ASDF managed to complete the planned 62 sand dams, assisted 21 SHGs to organize and provided training and support to some 502 SHG members of which 175 (or 34.86%) were males and 326 (or 65.2%) were females. The target of 700 SHG members engaged and trained and/or practicing soil and water conservation, sustainable agriculture, planting drought tolerant crop varieties, and establishing seed banks fell short by 198 people. There was however compelling evidence on the emphasis on women's active participation in leadership and project activities.

At the time of this evaluation ASDF staff estimated that 2,510 persons have directly benefited from the DFID funded project (i.e. reduced water fetching time, improved food security and nutrition). This exceeds the baseline target figure of 2,468 people by 42 beneficiaries. It is estimated that the project may surpass the stated project target of 5,427 people to benefit from the project once the sand dams are fully mature and supplying water. There may be need to have the actual overall total beneficiary figure verified after 3 years once the dams have matured and are fully operational. The total population at 21 self-help group village areas was reported as 17,896 people.

Table 2 ASDF DFID activity verification and score

Activity	Means of verification	Score/ weighting (see TOR section 2.2)	Comment
62 Sand dams constructed	 WRMA Permits Approvals Design drawings SHG, staff feed back Visit 8 SHGs with 24 dams Reports 	45% (out of 45%)	All 62 sand dams completed See Table 3 list of sand dams completed and permit/approval status - See annex 6 (i) sand dam permit approvals
700 SHG members trained/ practicing soil and water conservation/terrac ing methods on their farms	 SHG registration certs SHG, staff feed back Visit 8 SHGs Observation of soil terracing, tree planting Reports 	18% (out of 25%)	Some 502 SHG Members (males 175, Females 326) trained and/or practicing soil and water conservation including terracing on their farms. Fell short by 198 people - See annex 6 (iv) SHG list/location/male/female
700 SHG members trained/practicing sustainable agriculture /plant DR crops on farms	 SHG, staff feed back Observation of sustainable agriculture, seed banks and on farm DR crops Report 	14.3% (out of 20%)	Some 502 SHG Members (males 175, Females 326) trained and/or practicing sustainable agriculture plant drought tolerant crop, variety of crops on their farms. Fell short by 198 people No actual list of training and participants provide for verification.
12 livestock project	 SHG, staff feed back Observation of livestock management activities Reports 	3.5% (out of 5%)	10 livestock (8 goats, 2 bulls) of distributed to 10 group. This fell short by 2no. Fish project not reported See Table 4 for livestock distributed See annex 6 (viii) goat management training Woni Wa Mutyanthii
20 SHGs' capacity - leadership built	Observation/feedback on training group Reports	5% (out of 5%)	20 plus 1 SHG formed and registered See Table 4 SHGs and annex 6 (iii) Sample SHG certificate
	weighting under section 2, TOR, rgets against achievements)	85.8%	

4.2 Assessment of accuracy of reported results

62 Sand dams completed: We visited a sample of 8 of the total of 21 SHGs (no's 1 to 8 in Table 3) who between them have finished constructing 24 of the total 62 sand dams. We reviewed reports, permits, approval and design drawings of the 62 sand dams reported to have been completed. We established that the 62 sand dams have been completed and are at different stages of sand dam maturity, based on when they were built & the extent to which they have filled with sand see Table 3. Water Resources Management Authority (WRMA) had issued 41 permits and approvals to undertake construction works (See annex 6 (i) Sample WRMA permits and (ii) Sample WRMA authorization to construct sand dam).

We also got feedback from the SHGs, the sand dams community custodians and direct beneficiaries, about their involvement in sand dam site selections, surveys, and construction. The groups contributed significant amounts of time and labour on the project activities such as meetings, excavation of sites, gathering/preparing/transporting sand, gravel, stones and water, and providing security and storage of project materials such as cement, iron bars, timber and project tools purchased by ASDF. There was strong evidence of women's participation and group ownership, management and use of the water for domestic and in the farms use in the community. The self-help group members maintained registers of members and their attendance to work on the projects. The groups also confirmed that ASDF provided skilled artisan labour, support and trainings during the implementation of this component (see Table 3).



Members of Woni wa Mutyantii SHG on one of the three sand dams they have built.

Table 3 ASDF DFID Funded Sand Dams/shallow wells status as at 26th Oct 2016

SHG name	Total Sand Dams	Total Shallow Wells	WRMA permits/app roval issued	
1. Kinuvu	4	2	3	
2. Woni wa Mutyanthii	3	3	2	
3. Sindano wa Wia	3	2	1	
4. Mumbuni	2	2	1	
5. Kyangundi Water Project	2	0	1	
6. Kyala Development	4	1	3	
7. Watuka village	3	2	3	
8. Umanthi Nthangathini	3	1	2	
9. Ngao ya Kiome	4	2	3	
10. Makutano Shamba	4	3	3	
11. Bondeni Women	4	2	2	
12. Wendo wa Tungu	3	1	1	
13. Kwa Mbithi	2	0	2	
14. Kwa Makau	1	0	1	
15. Kwa Munyaka	3	0	1	
16. Kwa Mwatu Kyangwasi	4	3	2	
17. Woni Witu	3	1	1	
18. Muuo wa Kasyomatu	3	0	3	
19. Tukile	1	1	1	
20. Wikwatyo wa Muini	4	2	3	
21. Nthangu East SHG	3	1	2	
Totals	63	29	41	

20 Self-help Groups (SHGs): ASDF completed this component as planned. We were able to establish that 21 of 20 planned groups had been organized and fully registered as SHGs at the County Social Development Department. ASDF worked with one more SHG than originally planned for because Kwa Makau SHG withdrew after completing one sand dam as they were not prepared to continue without payment. Kwa Makau SHG was then dropped and/or replaced with another SHG following an agreement with ED and DFID thus making the total number 21 SHGs organized by end of project. We held group discussions with a sample of 8 groups out of 21 SHGs shown in Table 4. Also see annex 6 (iii) for sample SHG certificates. The 21 SHGs have a total of 502 members of which 175 (or 34.86%) are males and 326 (or 65.2%) are females. Overall the number of women (both in membership and leadership) was higher than that of men indicating substantial women's voice, leadership and participation in project activities

The set target of 700 SHG members at project planning stage has not been reached. The total SHG membership was 502 at the time of this evaluation. The shortfall was the result of various factors including: i) rigorous application of no payment for work principle by ASDF and cautioning members in advance of the hard work and time investment that is required for dam construction, ii) payments made to community groups to participate in activities by other organizations in the project areas causing some people not to want to participate in the ASDF projects without payment, and iii) loss of members through death, sickness and migration of young people to towns. The resulting decline in membership numbers in all the SHGs visited was noted. For example Umanthi Nthangathini SHG in 2015 had 65 members but by October 2016 has dropped to 35 people.

See annex 7 for examples of i) registration certificates verified out of 8 groups visited during the evaluation and ii) registered SHGs under DFID funded by location, village population, membership size gender composition as at 26th Oct 2016.



Members of the Woni wa Mutyanthii SHG in their tree nursery

700 SHG members trained and practicing soil and water conservation and terracing on their farms: The same reduction in numbers applies as in the point above. Evidence of training having been done and having been effective was abundant in the field visits and engagements with SHG members. We observed widespread terracing, tree and vegetable planting on farms as well as along sand dams. The SHG members reported positive outcomes from terracing and planting trees/fruit trees activities attributing the success to group member's resolve in the project activities, and ASDF trainings and support.

We established from the field reports and staff feedback that training targeting SHG members leading to improved soil and water conservation and terracing took the form of regular on-farm practical demonstration involving the members. The topics covered included: soil value and land preparation, fertilizer use (including organic fertilizer), terracing, tree and crop management, crop rotation and drought tolerant crops and seeds. Both ASDF and the SHGs we visited confirmed that all group members received training and practiced soil and water conservation including terracing on their farms. We also established that trained SHG members also assisted other non-members in the community with training. It was reported that non-group members also imitated what trained group members did on their farms. See annex 6 (v) sample Kinuvu SHG soil and water conservation, and annex 6 (vi) Kyala SHG tree management training.

700 SHG members practicing sustainable agriculture, seed banks and drought tolerant crops. Again the reduction in target numbers applies. We visited the SHG member farms and witnessed and/or received feedback about farming practices involving fertilizer use, pesticides and tomatoes, onions and pea gardens. The members confirmed that ASDF field staff conduct regular weekly to monthly training and support visits to their farms. ASDF confirmed this and we also verified from the reports that 20 SHGs received various training including seed bank training and support, vegetable and fruit gardening, pruning, grafting, drying, post-harvest management, seed preservation, treatment and storage. see Table 5. 502 SHG members received on farm trainings for this component. See annex 6 (vii) Mumbuni SHG post harvest management and Table 4 ASDF DFID SHGs, trees, seed bank and livestock project status as at 26th October 2016.

We questioned all SHGs visited and asked members to indicate who had been trained on the different topics. It is clear that all members attend the training sessions and that training is a highly valued and applied aspect of the project. Reference was often made to WASH training, leadership and governance training and the difference it has made when discussing achievements of the project.

Note on ASDF training: ASDF undertakes trainings to all SHGs in two forms. The first is regular ongoing on-farm field support/training to communities on activities such as terracing, land preparation, post-harvest management and tree planting. The other is

specialized training where they bring a specialist trainer to the SHGs such as a County Agriculture Extension officer for livestock management. ASDF will need to develop a better system for field tracking, reporting and documenting of the trainings.



Seeds in the bank Woni Wa Wiya SHG.

12 Livestock: Livestock distributed to 10 SHGs (8 goats and 2 bulls) falling short by 2. No explanation was provided for this shortfall by ASDF. We held discussions with the members of one beneficiary SHG, Kyangundi SHG. The group members are all involved in feeding, watering and cleaning of their bull. The bull has successfully served at least 22 cows with the group charging a low fee of KES 500/- for each service. The trainings covered livestock hygiene, disease and pest prevention, housing, feed management, breeding and records. For this component ASDF used a government agricultural extension officer for the training, with ASDF Field Officers carrying out the ongoing on-farm field support. See Table 4 livestock distributed and Annex 6 (viii) Woni Wa Mutyanthii goat management training report 13th Nov 2015.

Table 4 ASDF DFID SHGs, trees, seed bank and livestock project status as at 26th October 2016

SHG name	Tree Nursery	Demo Plot	SHG Seed Bank	Cows Distributed	Goats Distributed	Dam Vegetable Plots
1. Kinuvu SHG	1	1	1	0	0	0
2. Woni wa Mutyanthii SHG	1	1	1	0	1	1
3. Sindano wa Wia SHG	1	1	1	0	1	1
4. Mumbuni SHG	1	1	1	0	1	1
5. Kyangundi Water Project SHG	1	0	1	1	0	1
6. Kyala Development SHG	1	1	1	0	0	0
7. Watuka village SHG	1	1	1	0	0	1
8. Umanthi Nthangathini SHG	1	1	1	0	0	1
9. Ngao ya Kiome SHG	1	1	1	0	0	0
10. Makutano Shamba SHG	0	1	1	0	1	0
11. Bondeni Women SHG	1	0	1	0	1	0
12. Wendo wa Tungu	1	1	1	0	0	0
13. Kwa Mbithi SHG	1	0	1	0	1	0
14. Kwa Makau SHG	0	0	0	0	0	0
15. Kwa Munyaka SHG	0	1	1	0	1	0
16. Kwa Mwatu Kyangwasi SHG	1	1	1	0	1	1
17. Woni Witu SHG	1	1	1	0	0	0
18. Muuo wa Kasyomatu SHG	1	0	1	1	0	0
19. Tukile SHG	1	1	1	0	0	0
20. Wikwatyo wa Muini SHG	1	1	1	0	0	0
21. Nthangu East SHG	1	1	1	0	0	1
Totals	18	16	20	2	8	8

Other evidence of training reports:

- WASH PHAST Training Report 9th-20th Mar 2015 summary of 2 week training in PHAST for Kwa Mwatu and Watuka SHGs, ASDF WASH Dept.
- Watuka SHG Training Report on Voluntary Savings and Loans (VS&L) circa Table Banking
 —topics included book keeping, savings, lending and governance.
- County government Makueni, Dept of Agriculture, Livestock and Fishery, Tulimani ward livestock officer, 29th Feb 2016 –topics included livestock breeding and care, diseases, feeds and silage making, care of new-borns and milk production.

4.3 Relevance

4.3.1 To what extent did the project support achievement towards the MDG 1 & 7

The project and all its activities are directly related to the achievement of eradicating extreme poverty and hunger and ensuring environmental sustainability (MDGs 1 and 7). With its focus on water harvesting and improved food production in an increasingly drought-prone semi-arid area the impact on poverty of individuals and communities and on the environment is direct. The major impact on poverty is through increasing the quantity and quality of water and substantially reducing time taken to collect water for daily use. This frees up time for other activities, particularly food production which is further improved by increased availability of water. Environmentally sustainable farming practices are taught and practiced. A major contribution to environmental sustainability is achieved through soil conservation practices that include terracing to prevent soil erosion and increased soil moisture retention. The use of organic compost to fertilise the soil is another important contributor to sustainable farming practices. Availability of water in proximity to homesteads, introduction of quality breeding stock and training and animal husbandry also improves livestock farming.

Overall it is clear that the logic and assumptions that inform the collection of services and resources provided through the project combine and complement each other to make a significant impact on the quality of lives of individuals and on the environment that supports their lives. The impact is already being experienced by the beneficiaries even though the full benefit will only come with time.

4.3.2 Did the project successfully reach the intended groups; male and female farmers, including their families?

The project was successful in reaching, serving and supporting male and female farmers of one more SHG than originally planned. There are more women than men in the groups. The intended number of members was 700 but only 502 were reached. The explanation for this is that that though the planned number of SHG's was reached, the membership of those

groups fell off as members faced the implications of the time and effort required in the building of dams and other activities. The project was never the less able to deliver on its targets.

Despite this shortfall in the number of members expected, indications are that the numbers of beneficiaries may not decline. Through the members the family members are considered to be full beneficiaries of the project. All groups gave examples of how their wider communities benefitted directly from the project through equal access to, and payment for, i) water, ii) learning from the training members had received, and iii) having their livestock served by the bulls or billy-goats. This benefit includes those who withdrew from the SHG feeling that they could not commit to what was required.

4.3.3 Who has the project missed? Especially any groups, which are marginalised because SHGs do not involve all of society?

SHG members indicate that these groups are a continuation of a tradition of community members coming together to address needs and common interests that goes back for generations. The groups rely on the strong bond developed through closed membership with clear common purpose, clear and strictly applied by-laws. In some group activities such as the merry-go-round savings, and table banking (loans repaid with interest) there is a direct correlation between membership, contribution and benefit. However, with regards to access to water, the principle applied is one of inclusion and mutual help and support in times of hardship that extends beyond group membership. The sand dams are seen as a resource to the wider community but the responsibility of the SHG and its members. The communities surrounding the sand dams are closely related either through kinship or generations of living and working together. As the ones who have invested substantially in the building of the dam the members do see themselves as having some priority, particularly when water is scarce. But this is balanced against a broader understanding of the importance of interdependence for survival and the need to share essential resources and care for each other.

4.3.4 Did the project design and delivery ensure gender was mainstreamed throughout the project, and women were fully reached?

It is important to note that the SHGs were not 'designed' or initiated by ASDF. The SHGs preexisted their relationship with ASDF. All SHGs have a majority of women as members (65%) and all of the committees have a majority of women on them, although of the groups visited the leadership positions, particularly those of chairperson, are still predominantly filled by men. There is evidence of gender being a conscious aspect of the delivery of the project in the inclusion of men and women equally in all training, work and other activities. It is clear that women are using the groups effectively to improve their situation. It is for instance a source of great pride that women have become competent in building-related skills formerly considered men's work. This was much referred to as contributing to the achievement of self-reliance, the ability to take control of improvements to the homestead, and as a means of saving and generating income. Women, in particular, confidently and proudly claim that "there is no men's and women's work around here".

'Before I was a member of this (Kyungundi SHG) group I would wait for my husband to provide, but now I don't need to wait. When he calls form where he works in the town I can tell him I am sustainable. I have even bought 7 goats. Before, I couldn't pay school fees and the children would be sent home from school. Now I can borrow from our table bank when I don't have the money'.

Within the limits of this evaluation the question of the mainstreaming of gender is not a straightforward one to answer. Not having knowledge and experience of the local culture makes it difficult to understand the subtleties. For instance, it was mentioned that it is important for women to have men in positions of leadership to keep them involved and engaged. The suggestion is that there is a risk of being identified as women's groups which men will then not consider participating in. We were not able to confirm this.

Gender is certainly a conscious element of the project that is referred to and openly spoken about. The levels of confidence of women to participate, to claim their space and use their voice was evident throughout our engagements. It is however not possible to give a nuanced account of changes in gender dynamics over time as a result of the project. The voices, roles and needs of men were not as evident when issues of gender were discussed. This suggests that gender is related to as focused on women's needs and roles.

The conclusion is that the ability to participate equally in a successful practical project that provides a lot of opportunity for working together has provided fertile ground for challenging gender stereotypes and roles. While gender is clearly "in the stream", the main stream in this project is focused on rivers and dams and using water harvesting to improve the quality of life. There is a lot of evidence suggesting that over time working together under pressure to deliver on results will play a role in influencing the power relations between all the parties. There are positive signs of the monitoring system that is in place maintaining a focus on gender dynamics that will maintain change in this area.

4.3.5 Were any women or men prevented from participating because they were disabled, or widowed, or from another marginalised group?

Answers to this question were quite specific and considered, first the group would discuss the number of people with disabilities. The numbers were low, estimated by the community

at being below 10 persons. It was however not possible to confirm these numbers. All groups indicate that people who are disabled are not only included in getting access to water but indicated that they get free water. The general explanation was that, in the greater scheme of things, the amount of water used is not significant.

In one instance a member was asked to stand who had a debilitating physical disability. It was explained that he too was included in the work responsibilities of dam building. He would sit where he was comfortable and other members would bring large rocks to him that he could crush into ballast. This, and other questions, revealed a high commitment to inclusion, sharing and care. In the light of the amount and demanding nature of the work put in by group members the generosity and preparedness to share runs contrary to other cultures where self-interest prevails.

4.3.6 Why did some people drop out of the project and from the SHGs?

The majority of groups revealed that some of those who had been members before the group engaged with ASDF had dropped out. While there were clearly a range of personal reasons, a major reason given for this fall off in membership was an inability to commit to the work demands of being a member. The most extreme case was Umanthi Nthangathini SHG. When they first formed in 2012 they had 125 members. In the process of making the decision to approach ASDF 60 members left. When the realities of the time commitment and work required for sand dam building and other activities were realised another 30 left leaving the group with the 35 members they now have. This group has now completed 3 dams. Another example is the Watuka SHG that reduced from 40 to 20 members who also completed three dams and the full range of other activities.

This "drop-out" rate reflects the consequence of one of the greatest strengths of ASDF's approach. It simultaneously raises cautions around what could become a source of weakness if not managed with care and circumspection.

It reflects strength in the approach by revealing the rigorous and principled stance that ASDF takes in insisting that members take full ownership and responsibility for investing in their own development. Their practice includes a probation period of 6 months for a SHG before both parties commit to the partnership. In this time the expectations are made very clear. Visits are arranged to more established groups to get first-hand understanding of what is involved and the time and effort that will be demanded. The group is tested and warned not to proceed if they are not sure of their ability to make the commitment. It is a result of the rigour of this practice that the groups are left only with the "hard core".

Once the agreement has been made and work begins the demands are high. Words often used to describe ASDF's approach to how it makes its contribution are: 'focused', 'tough', 'transparent', and 'they deliver. These words are used when SHGs are asked why they chose ASDF when there are so many NGOs around who pay people to participate in their projects.

While this is a remarkable strength and achievement it also has within it the potential seeds of its own undoing. There are clear positive aspects to insisting that already stressed communities invest in owning their own development processes and projects. In the longer term there are potentially negative consequences of using the acute need to access financial resources and technical skills to exploit the labour and over-stretch SHGs in pursuit of "value for money" development. The ultimate measure of getting this fine balance right must be in the extent to which SHGs are left empowered, inspired, and better resourced to continue their developmental task. On balance this evaluation suggests that overall this project has managed to remain on the positive side of the fine line. But in some instances only just!

4.3.7 How well did the project respond to the needs of target beneficiaries, including how their needs evolved over time?

A significant characteristic of the relationship between ASDF and the SHGs we spoke to is that the groups had formed to meet common needs that included their need for water. Most of them started with a 'merry-go-round' savings scheme and some with terracing of lands. With one exception they had all first been in contact with, and impressed by the achievements of, another SHG that was working with ASDF. Through the exemplary SHG they were put in touch with ASDF. The one exception was the Watuka SHG who heard of ASDF at a training programme on sand dams given by the Water Resource Management Authority (WRMA).

ASDF was therefore responding to an established need for improved access to water and a collective commitment to doing something about addressing it. Along with the need for water came the associated needs for the improved health of humans, livestock, plants and the soil and water catchments that support it. The training provided to improve knowledge and practical skills in all of these areas was constantly referred to by SHG members as having met a need and made a positive difference to their lives. The knowledge and skills do not only remain with members but are passed on and shared with other members of the community as they work together. As access to increased amounts of water with decreased use of time to fetch and carry it becomes a reality the groups needs to improve farming practices and to start selling their surplus.

As the prospect of earning income improves as a result of the increase in productive time, capacity and skill, the merry-go-round savings groups become limited in their ability to meet

member's finance needs. The training provided to start and administer "table banks" from which loans can be taken and repaid with interest is growing to meet this need. How table banks are used is left up to the individual groups. Some put the proceeds from the sale of water into the table banks and use it as a source for maintaining the pumps, as well as giving loans to members.

The Kyala SHG started their table bank by each member selling a chicken and contributing KES 500. The original KES 28,000 was used to give loans to members who repaid with interest. The present balance of the bank is KES 142,000. Examples given of what the loans are used for include: sickness, school fees, goats, household furnishing and utensils, and pesticides for trees.

There is every indication from the feedback from SHGs that the needs and expectations of members are being well met by ASDF and the project. When looking back over what they had already done and achieved there was an unusual lack of evidence of unmet expectations. When asked what their aspirations and needs for the future are, they did not introduce needs that fell outside of what is already being addressed.

ASDF is continuing to think ahead to keep up with emerging needs. An indication of this is a growing focus on marketing and access to markets as a priority future challenge and area of support. It is however not the intention of ASDF to continue finding new needs to address. An important part of the intervention strategy is to terminate support to SHGs after a period of 5 years.

4.4 Effectiveness

4.4.1 To what extent has the project delivered results that are value for money?

There is a lot in the foundational values and approach of ASDF that contributes to achieving high levels of value for money. The primary value that shapes the approach and work of the organisation is "nothing comes for free". What this translates into in practice is that SHG members invest an estimated 48-50% of the cost of a sand dam in the collection of local building materials and the provision of all the non-technical labour required to build a dam. The strict and principled implementation of no payment for investing in your own development is applied.

Also inherent to the value for money equation is the extent to which the benefits of the project are multiplied by the principle of sharing all benefits with the immediate community, and promoting the benefits of the project beyond the host community into others. The final contributor is the fact that the infrastructure is estimated to continue operating for at least 50 years.

ASDF is very strict in the control of the materials it provides for construction. Materials are signed for and checked every day before work starts. If any materials go missing work is halted immediately and not resumed until all that is missing is returned. ASDF also displays a culture of thrift and effective management in its use of time and resources. When field officers were asked to describe their work process practices and routines it was revealed that they respect SHGs time and endeavour to start work on time (at 9:00am). In some instances, this can mean starting the journey into the field at 5:00 am. During the evaluation process all planned departures were executed with high regard for time. In the one instance when we arrived at a SHG late having kept them waiting, they let us know politely but clearly of their displeasure. The ASDF offices are functional but modest, office space is shared, and the meeting space is used for the parking of vehicles at night. Vehicles, expensive and essential work tools, are well cared for and maintained to get maximum value out of them. As an example, the vehicle used to take us into the field is 7 years old and has done over 360,000 kms. This is a high mileage for the conditions under which this and the other vehicles operate, indicating that assets are well looked after.

The most significant indicator of value for money is the fact that the project has delivered the planned outputs on time and on budget, and the value of the project has already been experienced and reported by the intended beneficiaries. However, the successful delivery on the ambitious targets of this project has taken its toll. Some SHG members have been forced to make extremely difficult decisions between the needs of their families and SHG commitments. Keeping up the discipline and pressure for delivery while maintaining this balance, places demands on the field officers and on ASDF as a whole. One senior manager in ASDF that we spoke to said "when we finished the DfID project we felt depleted – empty!" Our experience of the organisation overall however is that while it has put itself under pressure, it remains energised, committed and future-focused.

4.4.2 What has happened because of DFID funding that wouldn't have otherwise happened?

In addition to significant contribution of outputs and outcomes already reported, the DfID project has also contributed to the further development of ASDF and its practice. The specific focus on environmental sustainability and gender has served to embed these aspects into the ultimate value and purpose of the organisation and its practice. The establishment of the focus is evident in the monitoring system that is in use. Having firmly established the focus as a result area, the practice must continue to evolve and improve.

4.4.3 To what extent has the project used learning to improve delivery?

Continuous learning is a practice presented as central to the way ASDF goes about its work. It is also referred to in relation to the core identity of the organisation. When the origins of

the principle of 'no payment for work' was interrogated, the explanation given was that it came from learning derived from reflecting on earlier work practices and their impact. Learning is evident in many aspects of the work. Planning, monitoring and ongoing learning is viewed as a core value and informs the operating principles and practices. The director informed us that the message conveyed to SHGs is that: "if you are serious and focused about your development and want to be successful in getting things done you have to plan well, and have the discipline to stick to the plan."

The successful delivery of the project bears testimony to the fact that ASDF has internalised and uses the approach skilfully. It was interesting to note that a running total of deliverables were pinned up on the wall in two places of ASDF's offices and are clearly updated monthly.

In the DfID funded project in particular, learning is central from the outset. Exchange visits are used to facilitate SHGs learning from each other. This starts during the probation period to ASDF Work Progress
as at OCT 10th 2016
•Sand Dams- 278
•Water tanks-89
•Rock catchment-10
•Shallow wells-117
•Trees planted-165,856
•Terraces-318,650m

ensure that SHGs understand what will be expected of them and continues throughout as an important contribution to learning. Behind what are referred to as "trainings" are processes of ongoing learning facilitated by field officers and supported by field managers. This learning has many elements to it, from formal teaching by technical specialists of field officers to accompanied practical demonstration and implementation. Learning is the crucial process the ultimate value of the project is transferred through individuals to communities.

There is also a learning link between the field and the organisation. There are monthly review meetings with field officers to assess what is working and what is not, this is followed by managers getting together for a day to process and apply the learning to improved practice and implementation. This 'bottom-up' learning feeds into quarterly programme and project reviews and finally into annual cycles and the longer five-year rhythms of review and strategic planning.

4.4.4 What are the key drivers and barriers affecting the delivery of results for the project?

The key driver and barrier affecting the delivery of results for the project revolve around the willingness and ability of members of SHGs to invest the time and effort in their pivotal contribution to delivery. The project relies on the full participation of group members in all aspects, and does not pay for it. This goes against established practices of many NGOs and development agencies.

Another significant barrier and driver of the achievement of outcomes and impact is rainfall. This was correctly identified in the risk analysis from the outset. Rainfall meets more than the crucial need for water for household use and for improved agricultural yields. Rain also brings the sand to fill the dams for storing the water safe from contamination and evaporation. Until all the dams are mature (full of sand and within the sand water) the benefit of the project will not be fully realised.

Against great odds ASDF has managed to grow enough proof through successful SHGs on the ground to convince prospective SHGs that the investment of their time and effort is worth it. ASDF's investment in well supported and skilled field officers has succeeded in maintaining the commitment and has ensured the accomplishment of results to sustain it. The early benefits from the varied aspects of the project succeed in most instances in keeping the commitment of members, even in instances where rains have failed and it is taking time for the dams to become fully functional.

4.5 Efficiency

4.5.1 To what extent did the grantee deliver results on time and on budget against agreed plans?

As previously reported the grantee takes plans and their implementation very seriously and views them as a crucial driver of development. Even though the final report is not yet complete (due in December) the findings of the evaluation indicate that the project has delivered on all key activities, in time, and on budget.

4.5.2 To what extent did the project understand cost drivers and manage these in relation to performance requirements?

The organisation displays good understanding of cost drivers and exercises tight management practices to plan and implement effectively and efficiently. Evidence of consciousness of cost drivers and their management include monitoring prices of building materials, buying in bulk and storing when prices are good. Rigorous stock keeping and control of materials is applied. Time of staff and SHG members is viewed as a resource of value and is managed well. As an organisation operating in communities over an extensive area where great distances are travelled over poor roads, transport is a substantial cost to the organisation. This cost is managed in a variety of ways including field officers living close to the communities they serve and only coming to the office once a month. Vehicles are well maintained and expertly repaired. ASDF is planning to move the whole office to be more central to the area covered to cut the cost and time involved in travel.

4.6 Sustainability

4.6.1 To what extent has the project leveraged additional resources (financial and in-kind) from other sources?

ED leveraged 27% of the total project budget (£208,354) from 16 additional funders. A very substantial contribution came from the SHG members in the sourcing, collection and transportation of all the locally available building materials (sand, stone, and water). They also provided all the labour for excavating the foundations, mixing of the concrete, building the dam walls and digging and lining the wells. It is estimated that the value of the contribution of the SHG is in the region of 50% of what it would cost to construct a sand dam without their contribution.

4.6.2 What effect has this had on the scale, delivery or sustainability of activities?

The combined contribution of other funders and SHG members has more than doubled what would have been possible with the DfID funds alone. The contribution of SHG members represents much more than the financial saving. Through the contribution of members complete "ownership" of the developments are assured. This will have a very substantial impact on sustainability. Already groups are establishing funds for the maintenance of pumps and substantial effort is being put in to protect completed dams from being contaminated with soil due to erosion.

4.6.3 To what extent is there evidence that the benefits delivered by the project will be sustained after the project ends?

As mentioned above there is already evidence of continued investment in maintaining the dams, and wells, and further developing gardens, tree nurseries and orchards. The livestock we saw were being extremely well cared for with great pride. This is a model project from the perspective of sustainability as from the very outset it was the project of the SHG, not of ASDF, ED or DfiD.

4.6.4 To what extent will the benefits delivered continue for all groups, including women, and marginalised groups?

The benefits are seen by SHG members as being of benefit to the community. Nothing in the evaluation process suggested that this would change over time. It is however again worth noting that this approach to equally sharing scarce resources after investing in adding value to them is contrary to dominant global market-driven practices. If standard market principles prevail as more commercial farming and profitmaking becomes possible, there is a strong chance that the principles of equal access and sharing could come under pressure.

4.7 Impact

4.7.1 To what extent has the project achieved the intended impacts

The intended impacts are:

- Reduced time and distance to collect water.
- Improved food production.
- Increased household incomes.
- Improved health and nutrition.

The field visits demonstrated the direct relationship between all the above impacts. Once water becomes more available and the time to collect it is reduced the other three follow. Increased time and water for food production increases household incomes and improves health and nutrition. When adding to this improved seed, farming practices, soil conservation and fertilisation, animal and poultry husbandry and the impact escalates. A final significant contributor to realising these impacts is individuals having the surplus energy and time to invest in the future, as opposed to surviving from day to day. Having said that and seen the evidence on the ground, it cannot be taken for granted. There are many variables, not least of which is that farming practices that have endured for generations take time and effort to change.

In all 8 sites visited there has already, and remarkably, been experience of a reduction in time and distance to collect water. Pre-dams the distance varied between 5 and 15 kilometres and the time taken to collect water between 4 and 8 hours. Generally, where dams are now functioning, water-fetching time is reduced to a 15 to 20 minutes round-trip,

or even less. One of the groups visited are at present having to revert back to old distant sources of water as their dams are empty due to the failure of the April rains this year.

Having enough water to start producing vegetables on a commercial scale is a lot to expect in the short period of three years since dam construction started. And yet we saw evidence of this too (see photo). While some are still struggling to grow enough for their families as they wait for rain to bring sand and water to fill their dams, others are already demonstrating what a difference it will make once they are full. These intended impacts of the project will continue to grow and will only be fully realised in the years and decades to come. The evaluation suggests that there is the potential for other impacts that could contribute to



systemic changes that will play an equally important role in addressing poverty and ecological sustainability (see following sections).

4.7.2 To what extent and how has the project built the capacity of civil society?

Groups of people voluntarily coming together to find ways of meeting common needs are the foundation building blocks of civil society. SHGs are examples of this coming-together to do things you cannot do alone. This project intervenes into the development of SHGs with the intention of building their capacity to be more effective in their purpose to address critical water scarcity and improve the lives of individuals and communities. The evaluation has concluded that it has been highly effective in building that capacity of SHGs. This achievement however does not automatically translate into having built the capacity of civil society as an institution in fulfilling its broader societal role. We saw evidence of how SHGs can make a significant difference to the lives of their members. Beyond this substantial achievement, and beyond the limited 3 year span of the project, lies the potential of SHGs coming together to contribute more broadly to the role that civil society can play in addressing the tendency of society to impoverish human and ecological systems.

ASDF's ability to influence local / county government

This question adopts the common view that more formally constituted and funded NGOs (like ASDF) engage in advocacy to influence government on behalf of those most in need. The above view suggests that the role of NGOs is primarily to support the capacity of more civic driven and owned formations of civil society. Ultimately it is their (in this instance the SHGs) ability to influence their local and national governments that constitutes functioning participatory democracy. NGOs like ASDF who engage in lobbying and advocacy tend to be more effective if they do it as a part of a social movement including grass-roots formations.

The picture that emerged from the evaluation is that ASDF has managed to build relationship with a very newly formed and uncertain county government. But it is clear that this level of government is still in its formation stage, and is still tentative in relating to civil society organisations. As a part of the evaluation we secured appointments to interview two Ministers: i) the Minister for Water, Irrigation and Environmental Services, and ii) the Minister for Devolution and Public Service. But in both instances the Ministers failed to be present and gave no explanation. This gave us an idea of how difficult a task it is at this stage to engage productively.

ASDF understands the importance of building relationships with/influencing County Government and has started focussing on this. The big issue of concern around which engagement is taking place is around the granting of permits for the commercial harvesting of sand. It is however too early in the process to be looking for impact.

Through this project and its other work, ASDF is busy building a network of community based and driven SHGs. This network is made up of SHGs with a track record of taking ownership and investing substantially in engaging in their own development processes. Looking to the future this foundation of organised and skilled civil society is potentially a major asset. Kenya is undertaking what the World Bank refers to as "the most rapid and ambitious devolution processes going on in the world, with new governance challenges and opportunities as the country builds a new set of county governments from scratch". For devolution to be effective in serving the needs and priorities of impoverished communities and eco-systems power being devolved from national government will need to be met by the power of organised civil society driving and taking ownership of processes in pursuit of their needs and priorities.

ASDF's ability to build a wider donor base

ASDF is advancing along a course of steadily widening its donor base. Having grown out of ED and initially being wholly funded through ED, it is fast approaching its immediate target of reducing its dependence on ED by sourcing no more than 50% of its funds through them. ED has played an important role in introducing ASDF to new donors. ASDF has already proven their ability to grow their relationships, trust and contributions from new donors. ASDF is already looking for ways to present its work in international fora where it will become more known to donors.

SHGs capacity to be a strong organisation supporting the needs of the community.

This evaluation attests to the fact that this has already been substantially achieved. The collective support to communities achieved through this project cannot be underestimated. The contribution to the productive assets and skills of the community is very substantial indeed. They have proven strength in their ability to achieve this having rejected the common practice of payment for work. The organisational strength required to achieve this must not be underestimated. The project has contributed substantially to building the skills, the confidence, the financial base and the track record of success of SHGs. It is significant that they are not the creation of a funder paying for attendance and participation, but have grown out of the tradition of collective self-reliance.

The reality from the point of view of ASDF is that it has established relationships with these SHGs for three years through the project, but have concluded that 5 years is needed for the full benefits to be internalised to the point where ASDF can terminate its services. Hopefully by that time their principle of continuous learning will be well established, as will a network of SHGs learning and sharing with each other.

4.7.3 To what extent has the project enabled women to have a greater voice in the community, including a greater involvement in decision making

The project has provided women with the opportunity to participate equally in work previously considered to be the preserve of men – particularly construction work. Women claim that they participate equally in all group-related work. We heard on numerous occasions that ... "there is no men's work and women's work here". While women are in the majority in SHGs (65%) they are less well represented on the committees and least of all in the leadership positions. In our contact with groups the voices of women were strong and confident – particularly when it came to sharing details of the work done – from caring for the bull to mixing concrete. (see also section 4.3.4)

4.7.4 To what extent and how has the project affected people in ways that were not originally intended?

Most of the substantial impact on people's lives has taken place in ways intended and planned for.

One impact that is less explicitly stated in logic and the framework of the project but greatly valued is "time management". A number of times in interviews 'time management' was mentioned (completely unprompted) by individual members as one of the most valued benefits of the project. In probing behind these responses it became clear that what is being experienced by individual community members is an increase in the sense of being able to initiate and complete tasks and initiatives previously considered beyond them. This growth in personal sense of agency reflects more than increased knowledge through effective training. This suggests a significant shift in an individual's relationship to life, a move away from being a dependent victim to being an active participant in, even and initiator of, change. This shift in attitude, demeanour and intention was confirmed by field officers and other staff who have noted significant change in how SHG members present themselves and their contributions over time. There are reports of groups initially presenting as low energy and quite passive (even depressed) early in the relationship and then noticeably gaining confidence and dynamism as the project has progressed. Impacts of this nature are referred to in reports but not measured as critical indicators of impact and success.

At the institutional level, i.e. the other end of the spectrum from the personal, lies another area of potential impact that is under-emphasised in reporting. The emphasis at the early stage of project implementation is on immediate outputs and benefits to direct beneficiaries. In the present reality of a sector driven by short-term projects and results there is a danger of over-emphasising short term outputs and outcomes and under-emphasising the potential for deeper more systemic and long-term impact. Financial sustainability increasingly demands that organisations move rapidly on to deliver on the

outputs of the next short term project. What presents as an opportunity for longer-term impact in this project is the beginning of a network of mobilised, organised, skilled and effective SHGs coming together to eradicate poverty through environmentally sustainable practices. This represents a future foundation for civic driven change in a country that has committed to devolving power and responsibility.

4.7.5 To what extent does the project impact community members beyond immediate SHG members and families.

This point has been well covered elsewhere in the report. We add emphasis to the importance of the finding by sharing an account of our journey of attempting to better understand the underlying generosity that results in sharing the fruits of ones' labour equally with those who did not contribute.

In all the groups we met we heard of the enormous amount of time and commitment it takes to meet what is required of members of self-help groups. In many instances we heard of members leaving the groups as the demands and implications of the commitment became clear. The groups represent a small percentage of the people in the community that surround the dams. We were interested in how the members who did the work recover their investment from those who didn't contribute. We wondered if those who withdrew were excluded. We asked if members were charged less for the water than non-members. We asked if people with special needs and without money were excluded. In every instance we were met with the same answer. As soon as there was enough water to go around everyone had access and paid the same for the water. People with disabilities were not required to pay if they couldn't. "Their use will not make a difference" we were told. This principle, where those making the investment do not reap the benefit, goes against the system that operates in the world that we come from – so we continued asking questions to try and deepen our understanding.

One explanation given was that we should understand that the communities are made up of extended families and friends who have lived in a close web of interdependence for generations.

The last interview was with the ASDF Director. Yet again our fascination with the generosity of the SHG members was expressed. The Director shared an explanation he had been given when he had asked why those who have not done the work get equal access to the water. He was told ... "the elephants and all other animals do not work, but surely they have an equal right to water". It is understood that people are only one of those who need the resources vital to sustaining life. In economies reliant on interdependence, animals, plants and the river itself require water and sand to sustain life and health. There seems to be an understanding that the members of the self-help groups act on behalf of others in creating

and caring for the sand dams without owning them for personal benefit alone. The "Mwethia" principle of caring and sharing applies.

5 Conclusions

5.1 Summary of achievements against evaluation questions

The food security through increased access to water and food production project in Kenya has been highly successful. With some small and explainable deviations (85% achievement) it has come very close to delivering on all its major targets on key activities. Communities in Makueni County now have vastly improved access to new and improved water sources with 62 sand dams constructed as a direct result of the DfID project. The male and female farmers who played a major part in building these dams are now practicing soil and water conservation, and improved agriculture and livestock management techniques on their farms. They are diversifying their crops and share many examples of having increased food production. This is already starting to impact on the health and nutrition of intended beneficiaries and there are encouraging signs of increasing income to households.

There is evidence that these benefits are being passed on to and shared with the wider communities in which the SHGs have taken initiative and played a lead role. The leadership and planning functions in the SHGs they are a part of have been strengthened through the support and training services provided by the project. The crucial change in the lives of the (mainly women) beneficiaries has come about through reduced time required and distance travelled to collect water.

The project has not only been highly effective but also efficient, achieving high value for money. This has been achieved as a result of the underlying approach and philosophy of the implementing organisation insisting on high levels of investment by SHG members themselves. This has been encouraged and well supported by good fieldwork services and provision of resources that are not locally available. The high levels of participation and ownership of the beneficiaries, the strength of the SHGs and the appropriate design of the technology, and above all the value of the benefits will contribute to the sustainability of the project.

Although not included as a focus for the evaluation it is clear that ASDF achieved this success in close partnership, shared approach and much support from ED.

5.2 Summary of achievements against rationale for GPAF funding and value for money.

The GPAF fund aimed to "improve the lives of poor people in the 28 DFID focal countries and the bottom 50 Human Development Index (HDI) countries by supporting projects focusing on poverty reduction and the achievement of off track Millennium Development Goals (MDGs)".

It is clear from the achievements summarised above that this project has contributed directly and substantially to the purpose of the GPAF, delivering very good value for money. As a short-term DfID project it can be judged a significant success. It is the conclusion of this evaluation that there is much more value to be gained from the foundation that is being laid by this project as a part of the larger and longer work and purpose of ASDF. Simply judging the project as "good value for money" and moving on to the next one risks missing the potential of it contributing to longer term more systemic change in the global dynamic that makes poverty intractable and endemic. The ultimate link between MDGs 1 and 7, between human poverty and environmental sustainability is the tendency of dominant human systems to extract, concentrate exclude and impoverish through competition.

There is something of great value in a programme that supports the ability of people considered to be poor, to invest in improving the quality of their lives and the lives of those around them through sharing. Particularly when "those around them" include the full range of living systems that make up the ecology on which life depends. The most fascinating aspect of this evaluation was trying to get to the bottom of a seemingly intuitive understanding of the centrality of interdependence to the sustainability of living systems. An understanding that for humans to thrive they must come together in community and share not only with each other, but also with nature on which they depend. Herein lies the long term value of the project, not only to the direct beneficiaries, but to those seeking alternatives to the global systems that impoverish in pursuit of a sustainable world.

One of the unexpected findings was the change experienced by individuals in themselves that they attribute to learning about time management through the project. When this was interrogated it was revealed that having learned the discipline to plan and implement successful projects they now felt able to achieve things they would not have imagined before. Those field officers working with them have observed the change from passive victims to active and engaged builders of dams and futures.

6. Lessons learnt

6.1 Project level

There is a danger in over-applying short term 'value for money' measures of success. For the longer term benefits to be achieved the implementing organisation (ASDF) needs to be nurtured and helped to continue to develop. Wringing maximal 'value for money' out of the implementing organisation risks depleting them and undermining their potential to contribute to longer term pursuit of achieving the MDGs. It is important to learn from this evaluation not only what was achieved, but how it was achieved. ASDF's commitment to and skill in project management, monitoring, evaluation and ongoing learning and improvement is crucial. The expensive service of keeping and supporting skilled officers in the field lies at the heart of the success. The technical knowledge and skill in sand dam construction and agriculture is key. Behind all of this the dogged determination and courage to pursue an approach that counters the common practice of paying people to participate in their own development is testimony to ASDF and ED's commitment to applying important learning from past practice.

6.2 Policy level

At policy level the learning from this evaluation highlights the importance of understanding how to maximise the positive contribution and long term impact of short term project driven results based interventions. And also how to minimise the danger that the demands of delivering on short term 'value for money' results, extract so much value from the implementing organisation and the community members who do the work that they end up impoverished and unable to thrive.

6.3 Sector level

The sector is made up of sets of relationships between organisations creating chains through which development delivery and intervention take place. In this instance the chain includes DfiD, its management agent, ED, ASDF and SHGs. This evaluation design focused attention on the relationship between ASDF the SHGs and the ultimate beneficiaries. It is important to learn that significant developmental shifts are taking place in the relationships between SHG members, between SHGs and ASDF and between ASDF and ED. In all of them there are signs of increasing independence as foundations for more effective interdependence. There are also signs of devolution of power. It is significant to note that there is no personal contact between ASDF and DfID or its management agents. It is therefore not possible to gauge if any developmental shifts are occurring at that end of the chain.

6.4 GPAF management

It is important for those managing the GPAF programme to learn that though the grant is being administered through ED, ASDF have built their skills in planning and reporting through the process. The successful implementation of the project has built ASDF's confidence and competence to approach institutional and other large funders directly in the future.

7. Recommendations

7.1 For ASDF.

- 7.1.1 Appreciate fully what an achievement it is to have delivered this project as successfully as you have and to use this evaluation to help identify and build on what has contributed most to the achievement of success. Keep continuous learning central to your practice.
- 7.1.2 Recognise the leading role you are playing in building a movement of organisations on the ground who are proving to each other that there is value and reward for investing in own development without payment. Actively seek funders who understand and seek to support and promote your approach. Constantly seek out other collegial organisations in the world who share your approach to learn from and share with.
- 7.1.3 Without losing your focus on the expert, effective, efficient delivery of projects start building on your inter-organisational practice. When you terminate your relationships with SHGs after 5 years the impact of your work will continue to grow through the relationships SHGs have with each other and with County Government. There is every chance you will enter into new more inter-dependent relationships of mutual learning and collaboration with the SHGs, as you are moving into with ED.
- 7.1.4 In the process of diversifying your funder base, actively seek funders who understand and value your approach that goes beyond the delivery of projects alone.

7.2 For ED:

7.2.1 This evaluation did not focus on you and your practice, but through the focus on ASDF it is clear that there is progress in your relationship towards maturing and moving toward increased interdependence. As with the recommendation to ASDF, it is recommended that you identify clearly and build on what it is in your approach and practice that has contributed most to the achievement of this success.

7.3 For DfID:

7.3.1 You have contributed to and supported an important project, it is recommended that you use it as a case study when engaging the hoary old issue of payment for work.

LIST of ANNEXES (The annexes listed below can be found in a separate document)

- Annex 1 Independent final evaluation terms of reference
- Annex 2 Field Interview Guide
- Annex 3 List of people consulted and research schedule
- Annex 4 List of ASDF staff consulted
- Annex 5 Source documents read
- Annex 6 Schedule for in-country information gathering & field visits
- Annex 7 Samples of supporting documentary evidence of good practice carried out by ASDF and the SHG's:
 - Water permit
 - Authorisation to construct a sand dam
 - o Group Registration Certificate
 - o List of registered SHG by location, village, gender, leadership
 - Soil and Water Conservation training attendance list
 - Tree Management training attendance list
 - Post-Harvest Management training attendance list
 - Goat management training SHG attendance list
 - Seed distribution list
 - SHG members' activities attendance register
 - o SHG Table Banking records