MDG ACHIEVEMENT FUND

MDG-F Environment Joint Programme in Ethiopia

Enabling Pastoral Communities to Adapt to Climate Change and Restoring Rangeland Environments Programme

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Final Evaluation Report

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Anne C. Woodfine
Independent Consultant in Tropical Natural Resources / Sustainable Land Management
woodfine1@woodfine1.freeserve.co.uk

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Executive Summary

I. Programme Summary Table

Country	Ethiopia
Regions	Afar, Oromia, SNNP (Southern Nations, Nationalities and Peoples' State) and Somali
MDG-F Thematic Window	Environment & Climate Change
Programme Title	Enabling pastoral communities to adapt to climate change and restoring rangeland environments
Programme No.	MDG F- 1679
United Nations Agencies	United Nations Development Programme (UNDP) United Nations Environment Programme (UNEP) Food and Agriculture Organization of the United Nations (FAO)
Implementing Agencies (Federal Level)	Ministry of Agriculture (MoA) Environmental Protection Authority (EPA) Ministry of Finance and Economic Development (MoFED)
Programme Duration	21 October 2009 to 31 March 2013
Programme Budget	$4.00 million

II. Programme Description

The MDG-F Environment Joint Programme (JP) in Ethiopia is entitled *Enabling Pastoral Communities to Adapt to Climate Change and Restoring Rangeland Environments Programme*. The Government of Ethiopia had already committed to addressing these challenges through policy reform and targeted programmes, including: improving pastoral livelihoods and assets base; management of rangelands; and encouraging livelihood diversification. The JP was designed to contribute to strengthening capacities to implement these strategies and programmes at national, regional and community levels.

The JP aimed to achieve three Outcomes, namely:

Outcome 1: Climate change mitigation and adaptation options for pastoralists mainstreamed into national, sub-national and district development frameworks.

Outcome 2: Enhanced capacity of government agencies and respective pastoralist community institutions to effectively respond to the climate change risks and challenges at all levels.

Outcome 3: Pastoral community coping mechanisms/sustainable livelihood enhanced.

Outcome 1, at the Federal Level, was implemented by the Environment Protection Authority, with the United Nations Environment Programme (UNEP) as executing authority. At the Regional and Local Levels, bureaus and offices of regional IPs and the Ministry of Agriculture implemented programme capacity building and training [Outcome 2] and on the ground activities [Outcome 3], which were executed respectively by the United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO). UNDP was the lead UN agency for the programme, within the framework of UNDAF and the "Delivering as One" agenda and MoA was the lead agency of the GoE.

The programme worked in priority kebele / pastoral association areas of the four predominantly pastoral regions (Afar, Oromia, SNNP and Somali) of Ethiopia.

III. Summary of Conclusions, Lessons Learned and Recommendations

Conclusions

Relevance

1) It is very relevant that the Joint Programme is supporting the climate change agenda at the policy level in Ethiopia.
2) Ethiopia has faced challenges of rangeland management over many years, now exacerbated by climate change – which the inter-sectoral design of the JP is addressing more effectively than previous interventions.
3) The inter-sectoral design of the JP, with the three components addressing (1) policy; (2) awareness raising /capacity building / training; and (3) on-the ground activities was been highly commended as meeting the great need to link actions.

Efficiency

4) After the delayed start, the JP has been well managed.
5) Overall there has been strong national ownership of the JP, which has contributed to its success in implementing most of the planned activities.
6) There has also been strong ownership at region / woreda and beneficiary levels.
7) There have been communication / knowledge sharing issues between the UN partners and also between the GoE partners which have reduced the overall effectiveness of the programme.

Effectiveness

8) Over the programme period, the JP has resolved many issues which arise working inter-sectorally and under the "One UN" approach, thus is now a fairly good example of the "Delivering as One" approach promoted by the MDG-F initiative.
9) The JP has contributed to the attainment of the majority of the short-term development outcomes.
10) There are clear links between the three JP Outcomes, which mean there have been synergies in the results.
11) The development of clean potable water points (wells, birkas, cisterns) in dryland areas brings immediate benefits for communities, however may exacerbate range degradation[1].
12) The Climate Change Clearing House Mechanism to exchange information on CC is not working and it is unclear that it will be sustainable.
13) It is highly likely that other elements of the JP will be sustainable and are replicable.
14) For effective monitoring and evaluation, all programmes and projects require a well designed baseline study to be completed at programme/ project start-up, this was not done in this case.

Cross-Cutting Issues

15) The JP managed to involve women in awareness raising / capacity building / training and will clearly be beneficiaries of the permanent water points but the FE was not shown evidence of the programme having run gender-specific activities.
16) The gender dimensions in policies seem to have been neglected.
17) Programmes should be designed to be inclusive with respect to staffing.

Lessons Learned

[1] Water points encourage people to remain in the same areas for long period / all-year-round, thus unless well regulated, livestock may remain within a day's walk of the water points for grazing

1) The three UN agencies involved in this JP have different management procedures, but this experience of working together has enabled these agencies to harmonise and demonstrates that a level of cooperation and thus synergies can be achieved at country level.
2) The Mid-Term Evaluation was particularly influential in catalysing re-programming and efforts to ensure smooth implementation.
3) The design of the programme – with 3 Outcomes, each led by different UN agencies was designed to focus on each agency's area of comparative advantage, but arguably was not the most conducive to working together and information sharing.
4) Clearly agencies have different areas of technical and other expertise – these seem not always to have been used to best effect (notably FAO's technical expertise[2]).
5) Working intersectorally is also new to agencies of the Government of Ethiopia – it will take time to achieve all the potential synergies.
6) It is vital that greater attention is given to gender dimensions, as without this policies aimed at mitigation and adaptation are likely to exacerbate the hardships of already disadvantaged women in pastoral communities of Ethiopia, who depend on natural resources for survival.
7) The challenging design of the JP, working in four distinct regions of Ethiopia (see Section 4.5) has uncovered interesting local differences (*inter alia* in the interests of pastoral groups, suitable income generating activities, propensity of women to become involved in cooperatives). In future, programmes should be more nuanced in their approaches – taking into account different traditions (more support is clearly needed in some areas for cooperatives) and particularly geographical factors such as distance from markets, transport links etc.
8) For effective monitoring and evaluation, all programmes and projects require a well designed baseline study to be completed at programme/ project start-up.
9) The design of monitoring systems should focus on areas where the programme is directly affecting (progress on activities) and also wider planned impacts (e.g. towards the MDGs), ideally using routinely collected disaggregated government statistics / other surveys. It should involve the programme beneficiaries in the impacts of on the ground activities such as changing range management practices [as is being pioneered by FAO's LADA (Local Approaches to Degradation Assessment)] and the environmental impacts of wells / birkas etc.

Recommendations for Future Directions

1) The achievements of the JP should be publicized / disseminated at national and regional level to development partners, particularly those working with pastoralists.
2) Pastoralists living close to the rangeland sites restored under the JP are recognizing the benefits – and commendably already wish to extend them. This should be supported by GoE at woreda levels, including with help in future management of these areas to sustain the range improvements.
3) Grazing controls should be developed around the JP water points, to reduce the risk of overgrazing.
4) Wide scale rangeland improvement programmes are vital to sustain pastoral populations. It is unlikely that funds will be available to pay communities for bush clearing etc. (as was possible under the JP). Awareness raising of the benefits and options for lower cost range improvement (see Section 4.3) – including exchange visits to JP beneficiary communities, as these are vital to halt the vicious cycle of degradation (and contribute to Ethiopia's NAP and EPACC targets).

[2] For example on pastoral farmer field schools and tree nurseries

5) A more nuanced approach is needed for programmes working with pastoral groups, as clearly there are differences in interests, opportunities, suitability of IGAs etc. between pastoral areas of Ethiopia.
6) The concept and operation of cooperatives is very new to pastoralists and unlike anything they have an understanding of. The new cooperatives developed under the JP will require continued support from GoE to become effective income generating activities, also to repay their start-up funding (which is to be recirculated to other new groups in the same areas).
7) Communities should be encouraged to include activities in their cooperatives which do not involve livestock – as this will increase their adaptive capacity.
8) Future "Delivering as One" programmes need to be designed and implemented in such a way as to ensure that each involved agency can contribute their full range of expertise.
9) The UN agencies need to ensure that their individual bureaucratic processes do not deleteriously affect implementing partners.

List of Abbreviations and Acronyms

ADLI	Agriculture Development Led Industrialization
AIS	alien invasive species
AWP	Annual Workplan
BoARD	Bureau of Agriculture and Rural Development
BoEP	Bureau of Environment Protection or equivalent
BoFED	Bureau of Finance and Economic Development
CAHWS	Community Animal Health Workers
CC	climate change
CRGE	climate resilient green economy
EPA	Environment Protection Authority
EPACC	Ethiopia's Programme of Adaptation to Climate Change
FAO	Food and Agriculture Organization
FYGTP	Five-Year Growth and Transformation Plan
GCM	global climate model
GoE	Government of Ethiopia
GTP	Growth and Transformation Plan
IAS	invasive alien species
IGA	income generating activities
IP	Implementing Partner
IPs	Indigenous Peoples
JP	Joint Program
LADA	Local Approaches to Degradation Assessment
LCRDB	Livestock, Crop and Rural Development Bureau
LMC	Livestock Marketing Cooperatives
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MDT-F	Multi-Donor Trust Fund
MoA	Ministry of Agriculture
MoFED	Ministry of Finance and Economic Development
MTE	Medium Term Evaluation
NAMA	Nationally Appropriate Mitigation Actions
NAP	National Adaptation Programme (for UNCCD)
NAPA	National Adaptation Plan of Action (for UNFCCC)
NSC	National Steering Committee
NTFP	non-timber forest products
PC	Program Coordination Office
PIT	Programme Implementation Team
PMC	Programme Management Committee
PMT	Programme Management Team
PSC	Programme Steering Committee
PSNP	Productive Safety Net Programme
RC	Resident Coordinator (UN)
RCO	Resident Coordination Office
SNNP	Southern Nations, Nationalities and Peoples' State

SRS	Somali Regional State
TG	Target Group
TOR	Terms of Reference
ToT	Training of Trainers
UN	United Nation
UNCT	UN Country Team
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
WATSAN	Water and Sanitation

1. Introduction to the Evaluation

1.1 Goal of the Evaluation

The Joint Programme (JP) Final Evaluation (FE) had the following two goals[3]:

1. To measure to what extent the environment joint programme has fully implemented its activities, delivered outputs and attained outcomes, specifically measuring development results.
2. To generate substantive evidence-based knowledge, by identifying best practices and lessons learned that could be useful to other development interventions at national (scale up) and international level (replicability).

1.2 Evaluation Scope and Methodology

The information required to complete the final evaluation was collected using the following approaches:

- analysis of all JP documents, including minutes of meetings, workplans, financial records, quarterly reports, workshop reports, the Midterm Evaluation Report, 2012 field monitoring mission reports and JP publications (see full listing in Annex 2);
- reviews of country documents, including relevant policy documents and information on other related projects /programmes;
- discussions with the national Joint Programme Coordinator, JP Focal Pints (at regional level) JP Officers (at woreda level), members of the Joint Programme Management Committee, National Steering Committee, and regional implementation teams (see Annex 3 for details of all those met);
- discussions with other relevant staff in UNDP, UNEP and FAO;
- discussions with Ministry of Agriculture (MoA) and Environment Protection Authority (EPA) staff;
- meetings with staff of other development partner organisations also working on climate change / with pastoralists in Ethiopia (*inter alia* ICRAF, FAO, Oxfam);
- discussions with Spanish Cooperation and MDG Secretariat staff;
- communications with the State Minister for Agriculture and MoFED by email (as neither were available to meet the IC during mission period in Addis Ababa).

Also, during the in-country field mission which included visits to all four JP regions, four Woreda and ten kebele /PAs (see Annex 4 for full itinerary):

- structured community group discussions with programme beneficiaries (men and women);
- other participatory techniques;
- field visits for on-site observation of impacts on-the-ground.

In order to remain independent, after initial introductions, all meetings with regional and woreda implementation teams and with beneficiaries were as far as possible conducted without the presence of the executing and implementing authorities (UNDP, FAO, UNEP, MoA and EPA).

The use of multiple sources of information enabled the results to be triangulated from different sources, to help to verify the accuracy and reliability of the information upon which the findings are built, drawing unbiased conclusions, making recommendations and drawing lessons from the JP.

The evaluation was necessarily particularly attentive to the significant socio-economic, economic and environmental contexts and recent changes which have occurred in the JP regions and more widely in Ethiopia since the programme was designed.

[3] Quoted from IC's Terms of Reference (see Annex 1)

1.3 Limitations of the Evaluation Methodology

Not all programme PAs / kebele could be visited within the time period allowed for the final evaluation.

Not all intervention sites could be reviewed, beneficiaries spoken with, nor co-operative groups interviewed within the time period of the final evaluation.

A range of different languages are spoken by the programme beneficiaries. Due to unforeseen circumstances, the national consultant (who was responsible for translation) was unable to participate in most of the field mission. In order to facilitate translation, the region-based programme focal people joined meetings, although ideally these should have been completely independent of all executing and implementing agency staff. This risks informants feeling pressured to give more positive reports of their views on the programme than otherwise would be the case, but was unavoidable.

Numerous documents produced by the programme (particularly for Outcome 1, by EPA) are in Amharic. Due to the problems which affected the national consultant's ability to continue on the mission after the Somali region, it was not possible to analyse these in detail. EPA staff provided a verbal overview of some of the content.

Although prior arrangements had been made regarding the dates and likely times of visits, participants in meetings / site visits were more or less self-selecting (i.e. those available or interested participated), thus there could be some bias – either positive or negative, from the outcomes of the meetings.

In all but one case, men and women participated together in group discussions. In general, women participated fully, although in some instances this was only following specific encouragement to do so. Ideally separate groups should have been convened, but lack of both time and absence of women translators meant this was regrettably not feasible.

1.4 Structure of the Final Evaluation Report

Section 2 of this report provides a detailed description of the JP. Section 3 then presents the findings and analysis of the evaluation. The evaluator's conclusions, recommendations and lessons learnt are outlined in Section 4. Numerous Annexes follow, providing further details of the JP's achievements, references etc.

2. Joint Programme Description and Development Context

2.1 Background

In December 2006, the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the Food and Agriculture Organisation (FAO) and the Government of Spain (GoS) signed a major partnership agreement for the amount of €528 million with the aim of contributing to progress on the Millennium Development Goals (MDGs) and other development goals through the United Nations System. The MDG Fund (MDG-F) supports joint programmes that seek replication of successful pilot experiences and impact in shaping public policies and improving peoples' life in 50 countries by accelerating progress towards the MDGs and other key development targets. It supports national governments, local authorities and citizen organizations in their efforts to tackle poverty and inequality across the eight programme areas which cover the targets of the MDG Goals: children, food security and nutrition; gender equality and women's empowerment; environment and climate change; youth, employment and migration; democratic economic governance; development and the private sector; conflict prevention and peace-building; culture and development.

"Pastoralism, the use of extensive grazing on rangelands for livestock production, is one of the key production systems in the world's drylands. Nonetheless, throughout much of its long history its reputation has been poor and its practitioners marginalized by sedentary cultivators and urban dwellers. Pastoral societies have risen and fallen, fragmented into isolated families or constructed empires that span the world; their demise has been announced regularly, often in the face of entirely contrary evidence for their persistence."[4]

In Ethiopia, pastoralists constitute almost 14%[5] of the total population (of 88,356,000[6]) and occupy a total area of ca. 625,000 km^2 (over 60% of the country). The pastoral areas of Ethiopia have among the highest rates of poverty and the lowest human development indices, also low rates of adult literacy.

"Pastoralists have not historically been perceived as having a good relation with the environment. Accused of overgrazing and desertification, more recently they have been seen as responsible for methane emissions and low feed conversion rates. … The most important arguments revolve around overgrazing, land degradation and the alternative use of rangeland to sustain a broader range of biodiversity."[7]

"Official attempts to encourage pastoralists to destock and substitute quality for quantity have not been particularly successful. Indeed, in all non-authoritarian regimes they have been a complete failure. The reasons for this have been much debated. The traditional view …. is … that pastoralists view their livestock, especially cattle, as part of a ritual and prestige nexus, and not as a market enterprise; reducing herd numbers would therefore be equivalent to moving down the social ladder. The alternative view, that pastoralists are keyed into the market but also have elaborate risk-aversion strategies responding to uncertain disease and climatic regimes, gained considerable ground from the 1960s onwards. According to this view, it is rational for each individual herder to keep a maximum number of animals as insurance against epizootics or drought; the more animals there are to start with, the more will be left after a disaster." [6]

Mobility was always seen as an ecological and economic necessity, providing the best strategy for pastoralists to manage low net productivity, unpredictability and risk on arid and semi-arid lands.

[4] Source: http://www.fao.org/docrep/005/Y2647E/y2647e02.htm#P2_40
[5] PFE, IIRR and DF (2010) *Pastoralism and Land: Land tenure, administration and use in pastoral areas of Ethiopia*
[6] Source: http://faostat.fao.org (2013)
[7] Source: http://www.fao.org/docrep/005/Y2647E/y2647e10.htm#P15_8137

Seasonal movements were recognised as essential for pastoralists to tackle marked spatial and temporal variations in livestock grazing resources while enabling pasture restoration at certain times of the year. Apart from allowing the best use of range resources, it was also a way to avoid disease vectors in some areas (e.g. tsetse flies), to enhance exchanges with other land users (crop residues against animal manure), to access different market opportunities (e.g. to sell dairy surpluses or to purchase staples or animal drugs) as well as to join with kin for a seasonal festivity, acquire or share information, search for complementary sources of livelihood.

Apart from the availability of natural resources, mobility also critically hinges upon technical and socio-political factors. This includes human capital (in-depth knowledge of complex rangeland agro-ecological dynamics) and social capitals (social norms, duties and responsibilities instrumental to negotiate resource access and manage disputes through the principle of reciprocity). Mobility is not just about herds moving to varied grazing areas; it is also about managing the varied grazing areas so that herds can move. Mechanisms regulating access to resources must therefore be flexible enough to provide space for the necessary negotiations and arrangements that accommodates for different and often overlapping rights a) related to different user groups and b) over different resources, the relevance of which might change through seasons.

IIED (2008) concluded that "Governments and other actors external to pastoral system have persistently failed to understand the underlying rationale and dynamics of pastoralism." While FAO (2006) notes that "Unfortunately, mobility is increasingly being constrained by encroachment of arable farming on livestock routes and watering areas, and the effectiveness of the pastoral system is deteriorating fast. As a result, pastoralists are now burdening rather than supporting larger societies."

However, the Ethiopian Government has committed to address the challenges faced by pastoralists through policy reform and targeted programmes: improving pastoral livelihoods and assets base; management of rangelands; and encouraging livelihood diversification. The fact that pastoralists may be particularly negatively impacted by climate change is included in Ethiopia's the recently published Vision for a Climate Resilient Green Economy (GoE, 2011).

The MDG-F Environment Joint Programme in Ethiopia, entitled "*Enabling Pastoral Communities to Adapt to Climate Change and Restoring Rangeland Environments"*, was designed to contribute to strengthening capacities to implement the GoE strategies and programmes at national, regional and community levels, while supporting the Government in its endeavor to address climate change challenges.

2.2 Joint Programme Start and Duration

The Joint Programme (JP) was scheduled to start in October 2009. However, the JP start-up was delayed as time was required to agree the institutional set-up[8], also to recruit the Programme Coordinator. The JP implementation actually began in July 2010.

The JP was originally due to close at the end of October 2012, however in view of the delayed start-up, the concrete results which had been achieved and the number of important activities awaiting completion, a further 6 month extension was granted and the JP is to be officially closed on 31 March 2013.

[8] There was "undecided initial ownership" between the MoA and EPA (see Section 3.2A for details).

2.3 Intervention Logic

The JP involves the participation of pastoral communities (agro-pastoralists, sedentary pastoralists and transhumance pastoralists). It was implemented through the collaboration of the Ministry of Agriculture (MoA), the Environmental Protection Authority (EPA), the Regional States of Afar, Somali, SNNP and Oromia, also three United National agencies, namely the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the Food and Agriculture Organization (FAO) - within the framework of UNDAF and the "Delivering as One" agenda.

The JP was designed based on the following key areas of comparative advantage:

- building on the UN's experience supporting Ethiopia on high level policy issues, as well as achieving replication of its pilots on the ground;
- drawing on the wide range of very rich experience from past and on-going UN supported projects;
- building on potential synergies among agencies in the UN family;
- building on previous and on-going Government of Ethiopia (GoE) efforts;
- focusing on pastoral areas to maximize coping mechanisms in areas recognised to be most affected by climate change (CC);
- focusing on the fragile environments[9] of pastoral areas;
- involving and building links and capacity among multiple partners across sectors;
- complementing the support of other ongoing bilateral, multilateral and non government agencies work in the pastoral areas.

The three United National agencies involved have comparative advantage in differing areas of the programme – accordingly UNEP led Outcome 1, UNDP Outcome 2 and FAO Outcome 3.

Pastoralists are renowned for being adaptable and that their mode of life enables them to move to take advantage of changing rainfall patterns. However, recent increased sedentarisation of formerly transhumance pastoralists (e.g. around permanent water points) and the rate of change of weather patterns means that traditional coping mechanisms are no longer possible nor sufficient respecively. The programme aimed to enhance the climate resilience of the pastoralists by:

- developing participatory climate-induced drought-related impact management mechanisms including community-based drought early warning and response systems and measures grounded on livelihoods/asset protection and building to address the climate change impact through livelihood diversification activities;
- encouraging preservation of fodder (hay and dry season range reserves); timely restocking and de-stocking activities; controlling drought-induced livestock diseases;
- facilitating local and cross-border livestock trading, with better market information, credit provision, certification for quarantine; promotion of 'commercialization' of livestock production objectives through cooperatives;
- establishing of community development funds that are tailored according to the pastoralists' nature and character to support pastoral activities in trading as well as livestock rearing; strengthened veterinary services;
- training of community-based animal health workers from the pastoralists;
- expanding strategically-placed water points (including traditional deep-wells, boreholes, and environmentally friendly water harvesting technologies) (including traditional and community-based water management schemes);
- encouraging traditional environmental protection and natural resource management systems;

[9] Variously termed, including drylands or rangelands

- protecting good and fair range and upgrading of poor or degraded rangelands;
- strengthening micro-environmental management of base camps including agro-forestry /social forestry interventions;
- controlling bush encroachment and reforestation to combat desertification;
- reviving and modernizing rotational range use systems.

2.4 Programme Goal

The overall goal of the joint programme was to enable selected pastoral communities to adapt to climate change and initiate restoration of areas of highly degraded rangelands in four regions of Ethiopia.

2.5 Immediate and Development Objectives of the Joint Programme

The immediate and development objectives of the joint programme are encompassed in the three outcomes, namely:

Outcome 1: Climate change mitigation and adaptation options for pastoralists mainstreamed into national, sub-national and district development frameworks;

Outcome 2: Enhanced capacity of government agencies and respective pastoralist community institutions to effectively respond to the climate change risks and challenges at all levels;

Outcome 3: Pastoral community coping mechanisms/sustainable livelihood enhanced.

2.6 Joint Programme's Planned Outputs

The JP's planned Outputs were:

Output 1.1 Improved national/regional/local development plans, key sector policies, strategies and partnership to mainstream climate change mitigation and adaptation options into policy frameworks;

Output 1.2 Instruments/guidelines for mainstreaming federal, regional and district CC adaptation and mitigation in pastoral areas developed;

Output 2.1 Federal/Regional/district and pastoral community institutions capacity and service delivery to respond to pastoralist needs in the face of changing climate;

Output 3.1 Target community climate change sensitive needs identified, assessed and priority interventions agreed;

Output 3.2 Integrated Rangeland Management Implemented in the targeted districts for better livelihoods and coping with adverse climatic effects;

Output 3.3 Communities in 17 villages of the six districts participate in livelihood diversification activities so as to cope with climate change related livelihood risks.

2.7 Links to the Millennium Development Goals, United Nations Development Assistance Framework, the Paris Declaration and National Priorities

The joint programme was designed to contribute to the attainment of the following Millennium Development Goal:

- MDG 7 - ensuring environmental sustainability;

and was also expected to contribute to of:

- MDG 1 - poverty eradication
- MDG 2 - education;
- MDG 3 - gender equality;
- MDG 4 - health.

The JP contributed to the 2008-2011 United Nations Development Assistance Framework (UNDAF) Outcome entitled "Humanitarian Response, Recovery and Food Security", namely:

> By 2011, significantly strengthened capacities of the Government, communities, and other relevant stake holders to respond to situations that threaten the lives and well-being of a significant proportion of a population, which require rapid and appropriate action to ensure their survival, care, protection and recovery while enhancing their resilience to shocks and leading to food security and sustainable livelihoods.

The JP continued to contribute to the current UNDAF (2012-2015) (UNDP, 2011), which specifically includes a focus on pastoralists and environmental issues in pastoral areas.

The JP conforms to a number of key indicators of progress in alignment, harmonisation and managing for results in the Paris Declaration, notably:

Alignment

4 – Strengthen national capacity by co-ordinated support
5a – Use of country public finance management systems

Harmonisation

9 – Use of common arrangements or procedures
10 - Encourage shared analysis

Managing for results

11 – Results-oriented frameworks.

The programme is aligned to and contributes to the Government of Ethiopia's:

- Growth and Transformation Plan (2010/11-2014/15) (GTP) (GoE, 2010c)
- Ethiopia's Agricultural Sector Policy and Investment Framework 2010 – 2020 (GoE, 2010b)
- Programme of Adaptation to Climate Change (EPACC) (GoE, 2010d)
- Vision for a Climate Resilient Green Economy (CRGE) (GoE, 2011)
- Nationally Appropriate Mitigation Actions (NAMA((GoE, 2010a)

2.8 Joint Programme Budget

The total budget of the Environment Joint Programme was US$ 4 Million from the MDG Spanish Fund.

The overall budget was managed as follows:

UNEP	$422,650	Outcome 1
UNDP	$1,548,290	Outcome 2
FAO	$2,029,060	Outcome 3

2.9 Geographic Location

Focusing on pastoral areas, the programme implemented its activities in some of the most geographically isolated regions of Ethiopia (also see Section 4.5). The target regions were selected in consultation with Government at the Federal level. The criteria for selecting these regions was

determined based on the extent of vulnerability to climate change, ecological fragility, human and livestock populations and the level of poverty among pastoral communities. The decentralized authorities at the regional level subsequently selected the most vulnerable woreda for implementation. Subsequently at woreda level, the most vulnerable kebele / pastoral associations (PAs) were selected by the decentralized authorities. The Table 1 and the map in Annex 5 provide further details of the geographical locations in which the joint programme worked.

Table 1: Joint Programme Regions, Woreda and Kebele / Pastoral Associations

Region	Woreda	Kebele / Pastoral Associations
Afar	Telalak	Kulili Adalina Dewe Waydalelina Yealo
	Adaa'r	Siyilu & Waki Jeldi Ledi
Somali	Ayisha	Alhele Aligedi Dewelle
	Harshin	Medewin Farah liben Hafufile
Oromia	Teltele	Saba Sarite
SNNP	Solamago	Giyo Gura Omo Rombe

2.10 Joint Programme Beneficiaries

The joint programme targeted a total of 32,160 pastoral community members (14,658 women and 17,502 men) as direct beneficiaries[10].

[10] With the JP having a major focus on build capacity through provision of a range of various training courses (notably training of trainers and training of teachers) in Outcome 2, these individuals now are endowed with valuable information and knowledge which it is anticipated they will continue to pass on to many more beneficiaries in the future.

3. Findings of the Final Evaluation

3.1 Design Level of Joint Programme

A. Relevance

Extent to which the objectives of a development intervention are consistent with the needs and interest of the people, the needs of the country and the Millennium Development Goals

Increasing Weather Variability and Climate Change

Ethiopia has become warmer over the past century and human induced climate change will bring further warming over the next century at unprecedented rates. Climate models suggest that Ethiopia will see further warming in all seasons of between 0.7°C and 2.3°C by the 2020's and of between 1.4°C and 2.9°C by the 2050s. It is likely that this warming will be associated with heat waves and higher evapotranspiration. There is much uncertainty about the future distribution, timing and intensity of rainfall; however, changes have been noted in the dates of onset, duration and amounts of seasonal rains, especially in pastoral areas. More frequent heavy rainfall events are expected and this is likely to result in increased flooding. Changes in the severity and frequency of drought and flood events are difficult to project, because these events are influenced by the El Nino Southern Oscillation and sea surface temperatures in the Indian Ocean, and are difficult to model with any degree of confidence.

The CRGE report (GoE, 2011) emphasizes that the "uncertainty about the exact nature of future climate change must not be interpreted as uncertainty in the need to act now to minimize future damage".

It is vital that climate resilience (the ability to cope with and manage the changes brought by the increasing frequency of extreme weather events and longer term future changes) is increased, so that the well-being of the people and the economic growth and prospects of the country are not damaged by the impacts of climate change. A recent study[11] by the World Bank projects that unless steps to build resilience are effective, climate change will reduce Ethiopia's GDP growth by between 0.5 and 2.5% each year. As a worst case scenario, in 25 years time, Ethiopia will have only half the potential total GDP it could have attained and this will be because of the negative impacts of climate change (GoE, 2011).

The CRGE (GoE, 2011) particularly notes that livestock and those dependent on livestock (i.e. pastoralists) are particularly vulnerable to climate change as yields are impacted directly through temperature effects (on annual growth, milk / wool production, also reproduction); and indirectly due to changes in the quantity and quality of pasture, forage, fodder availability, also likely increases in disease and parasites. Pastoralist communities are therefore particularly negatively impacted by increasing weather variability and climate change. The interactions between these problems and potential benefits of greater CO_2 'fertilisation' are largely unknown", however in the pastoral areas where lack of moisture is the major factor limiting plant growth, CO_2 'fertilisation' is unlikely to result in increased biomass production (see Box 1).

[11] World Bank (2008) Economics of Climate Change in Ethiopia

Box 1: Possible Implications of Climate Change for Pastoralists (IIED, 2008)

"Climate change leading to rising temperatures and increasing rainfall variability will affect different regions and people in different ways. The implications of climate change for pastoral livelihoods are not yet fully understood. Two opinions prevail. Some see pastoral groups as the '*canaries in the coal mine*' in the sense that that they will be the first to lose their livelihoods as rangelands and water points dry out. Others argue that pastoralists are the best equipped to adapt to climate change, as pastoral livelihood strategies are honed to respond to scarce and variable natural resources and cope with difficult and uncertain agro-ecological conditions. In this scenario, climate change could result in an extension of territories where pastoralism could show comparative advantages.

Enhancing and securing pastoralists' access to strategic resources is essential if they are to respond effectively to the effects of climate change. Yet, as most contributors agree, these capacities have been eroded as a result of their historical and social marginalisation. Today, pastoralists' vulnerability is thus more a consequence of this marginalisation than climate change per se, although the former will clearly exacerbate the latter."

During the Final Evaluation, beneficiaries, PITs and PMTs unanimously expressed that droughts are becoming more frequent across the drylands of Ethiopia (e.g. reportedly from every ten years ca 20-30 years ago to currently every 1-2 years). Notably in Afar, local people reported that rains are not coming later (as generally reported), but that the weather patterns are now no-longer predictable.

The JP's focus on climate change adaptation is even more urgently required today in 2013 than it was when the programme was designed (presumed 2007-2008), as it is an over-arching concern which even more clearly now jeopardizes recent development gains, adding a further challenge to existing development issues.

Degraded Status of Rangelands

A combination of factors contributes to the currently highly degraded status[12] of many rangelands in Ethiopia, including:

- continuing growth of human and livestock populations;
- overgrazing (either in absolute numbers, or continual grazing over prolonged periods of time);
- deforestation due to:
  - over-harvesting for wood fuel;
  - over-harvesting for charcoal production (for local consumption or sale to neighbouring regions);
  - conversion of rangeland for settled agriculture / horticulture;
- national ban on the use of fire for range management introduced in the 1970's;
- invasion by alien species, most notably *Prosopis* spp., which can dominate and shade-out other vegetation, particularly grasses – reducing biodiversity;
- changes in land tenure[13], which is *inter alia* constraining the traditional mobility of many pastoralists;
- habitat conversion (due to expansion of settled / irrigated agriculture and urban expansion), which is also constraining the traditional mobility and hence access to traditional grazing lands

[12] including degradation of soils, loss of biodiversity and decline in ecosystem services

[13] In Somali Region, informants stated in the participatory meetings that land was being divided up into individual plots, which is seen as progressive, but in the face of climate change could be a maladaptation, given the high spatial variability of rainfall in drylands, as individual families could be denied access to rangeland where rain has fallen while neighbours benefit

of many pastoralists, notably croplands are extending into the better watered drylands – where pastoralists would formerly have grazed their livestock at the height of the dry season (FAO, 2006; FA), 2009a; FAO, 2010a; GoE, 2010b; IFPRI, 2010; and Obe, 2012).

These factors have led to a reduction in the grazing potential of the range, reducing its resilience to the deleterious impacts of climate change and also has led to the degradation of fragile soils (including their physical, chemical and biological properties) leading to accelerated erosion (by wind and water). Options are available to reverse this vicious spiral into a virtuous cycle of improving rangeland vegetation and improved the functioning and health of the ecosystems, some of which were included in the JP. These need to be massively scaled-up, probably using less labour intensive options.

Contribution to National Policies

Unlike many other SSA countries, Ethiopia does not plan to develop a CC policy, but to mainstream CC within sectoral policies.

The national Growth and Transformation Plan (2010/11-2014/15) (GTP) carries forward the successful strategies of the previous national development plan [the Plan for Accelerated and Sustained Development to End Poverty (PASDEP)]. Due to the rising profile of issues of CC, including catalysed by the JP, the GTP specifically addresses climate change and environmental issues in a separate section.

The design of the MDG-F Joint Programme (JP) contributes to the Growth and Transformation Plan (2010/11-2014/15) (GTP), also the Agricultural Sector Policy and Investment Framework 2010 – 2020: Ten Year Road Map (GoE, 2010) and other sectoral development strategies and plans. In the pastoral areas, the Five-Year Growth and Transformation Plan (FYGTP) focuses on livestock development; water for people and livestock; forage development; irrigation; improving the livestock marketing system; and strengthening implementation capacity - with the exception of irrigation, all of these were included in the JP.

The JP also contributes to aspects of potential adaptation options 1,4,6,7,10,16,24,25,27 of the Ethiopia's Programme of Adaptation to Climate Change (EPACC) (GoE, 2010d) (see Annex 6) and to aspects of the forestry / forests and agriculture in the Nationally Appropriate Mitigation Actions (NAMA), (GoE, 2010a). These have been further highlighted in the recently published Vision for a Climate Resilient Green Economy (GoE, 2011), as agriculture is estimated to contribute 51% of Ethiopia's GHG emissions, notably the current cattle population (over 50 million) and other livestock (~100 million) generated an estimated 65 Mt CO_2e per year in 2010 (of the 150),mainly in the form of:

- methane emissions arising from digestion processes;
- nitrous oxide emissions arising from excretions.

Both of these could be reduced in pastoral areas, via actions such as those promoted in the JP (also see reports such as LEAD and FAO, 2006).

Design Relevance at Local Levels

The CRGE (GoE, 2011) notes that the "far reaching nature and need for adaptation means that communities across Ethiopia need to take ownership and responsibility for appropriate action to build resilience".

At regional and woreda levels, the inter-sectoral design of the JP, with the three components addressing (1) policy; (2) awareness raising /capacity building / training; and (3) on-the ground activities have been highly commended as meeting the great need to link, for example, action to improve access to water in areas suffering from increasing frequency of droughts with training both on immediate concerns regarding on health and sanitation, plus awareness raising to help beneficiaries better understand and prepare for increasing weather variability. Respondents at the regional level noted that the JP was the

only programme / project they were aware of which integrated the key sectors – and furthermore identified this as a design element which contributed to the long term sustainability of programme achievements – also acceptance by the communities.

At these decentralized levels, there was a universally high degree of appreciation of the programme, demonstrating a high level of ownership – with informants asserting that they were convinced that this approach meets urgent local needs and that the on-the-ground actions are valued sufficiently that they will continue to be supported post-programme, via woreda and regional water, natural resource, health and co-operative bureaus.

At community / kebele / pastoral association (PA) and beneficiary levels, there was keen interest in participating in the programme activities, including attending the various training courses provided by the programme (see Annex 7). Local water structure management and WATSAN committees also re-vitalized range management committees should sustain programme interventions. In notable cases, for example beneficiaries in Sarite, Oromia reported that the programme had inspired them to continue to construct a further pond, close to the two programme-supported ponds, to enable more people to benefit – and had agreed by-laws to govern water use (i.e. one pond for human use, the other for livestock) (see photos in Annex 8). A group in Saba PA in Teltele woreda, Oromia plan to expand the 70ha enclosure they undertook with programme support as they already (in less than 2 years) see the benefits – and have devised an adaptive management system to respond to changes in weather patterns.

The ***choice of pilot areas*** has proved to highly commendable. Many programmes and projects, particularly those of short duration and "pilots", choose to target sites for "quick wins", where there are likely to be considerable and clear impacts on the ground within the project / programme's lifespan. The designers of the MDG-F Environment Joint Programme and the Government at Federal and decentralized levels resisted this temptation and instead genuinely focused activities of this JP on the kebeles / pastoral associations which were most in need of support (based on the following criteria: the extent of vulnerability to climate change, ecological fragility, human and livestock population and level of poverty among pastoral communities).

There have been considerable implications / challenges to working in the most vulnerable kebele / PAs. Geographically, they are some of the most remote (see map in Annex 5), not only from Addis Ababa, but also from the region centres, for example Solamago and the PAs in SNNP are ca. 12 hours drive from Awassa, where that region's Focal Person was based. For Oromia, the FP was based in Addis Ababa, 2 days travel from Teltele wodera. The Joint Programme Officers for each woreda are based in their respective woreda centre – and again, this raised challenges over distance in every region (see below regarding transport for Joint Programme Officers).

The remote JP locations created other transport and logistical problems, including for:

- beneficiaries attending training courses;
- transporting materials and equipment to sites (e.g. equipment for well drilling in SNNP);
- accessing markets for livestock to be sold by livestock marketing / fattening co-operatives (e.g. Solamago pastoralist group, based over 100km by dirt road from Jinka, itself is a remote small town in SNNP).

The JP could more easily have focused on a single administrative region of the country, to focus on-the-ground investments and have greater local impact. Instead, the JP worked in the four main pastoral regions, thus actual impacts on the ground after the short time-period of implementation in each are quite limited. However, some of the differing outcomes from quite similar interventions demonstrate

that there are clear differences between groups of pastoralists and their wider environmental situations (*inter alia* geographical, socio-economic and cultural differences). [See Section 4.5 for further details.]

Contribution to Solving the Needs Identified in the Design Phase

The JP has not been implemented for a sufficiently long time period for many of the on the ground actions (notably range enclosures, re-seeding, bush control) to demonstrate they can contribute to solving the needs identified in the design phase – however, the wide ranging scope and inter-sectoral nature of the JP means that it is highly likely to contribute to the MDGs in the longer term (see Table 2).

Table 2: Links between the Joint Programme and the Millennium Development Goals

No.	MDG Goal	Joint Programme Links
1.	Eradicate extreme poverty and hunger	Rangeland management increasing livestock productivity, increasing availability of food, thus reducing hunger and poverty. Co-operatives generating additional incomes, contributing to greater food security and possibly improved diets
2.	Achieve universal primary education	Reduced need for transhumance by pastoralist families, which reportedly causes school drop-outs
3.	Promote gender equality and empower women	Where possible through awareness raising, capacity building and training, the JP has tried to encouraged women to participate.
4.	Reduce child mortality	Provision of clean drinking water, also education in hygiene and sanitation, reducing incidence of diseases and contributing to reduced child mortality. Improved livestock productivity and alternative IGAs improving ability to provide more balanced diet for children
5.	Improve maternal health	Clean drinking water and improved diets improving maternal health
6.	Combat HIV / AIDS, malaria and other diseases	No clear impact. However, HIV/AIDS was one of the training topics in all Training of Trainer and other training courses conducted at federal, regional and wereda levels. These will have contributed to increased awareness of the beneficiaries, but this has not been quantified.
7.	Ensure environmental sustainability	Integration of climate change adaptation and mitigation into GoE policies; capacity needs assessments, capacity building at federal, regional and local levels on CC; also CC awareness raising among teachers, trainers and local communities Improved rangeland management thus contributing to increasing CC adaptation and increasing above and below ground carbon sequestration Encouraging improved livestock productivity thus increasing CC adaptation and contributing to reducing GHG emissions *Possible deleterious effects of increasing number of perennial potable water points*
8.	Develop a global partnership for development	On the ground programme activities known to beneficiaries as the "Spanish Programme"

Several of the Outputs of Outcome 1 will be useful for the long-term, assessing the gaps in capacity at different levels – and also providing information which will be distributed in local languages to the regions and woredas on climate change adaptation and mitigation.

Joint implementation

Design

The programme was developed from the results of a study by the Ministry of Agriculture (MoA) and as far as could be ascertained was designed jointly by the UN Implementation Agencies (UNDP, FAO and UNEP) in consultation with the Executing Agencies (EPA and MoA). The three UN agencies worked largely on separate JP Outcomes, which seems not to have been very conducive to joint implementation, but representatives met regularly in programme coordination meetings.

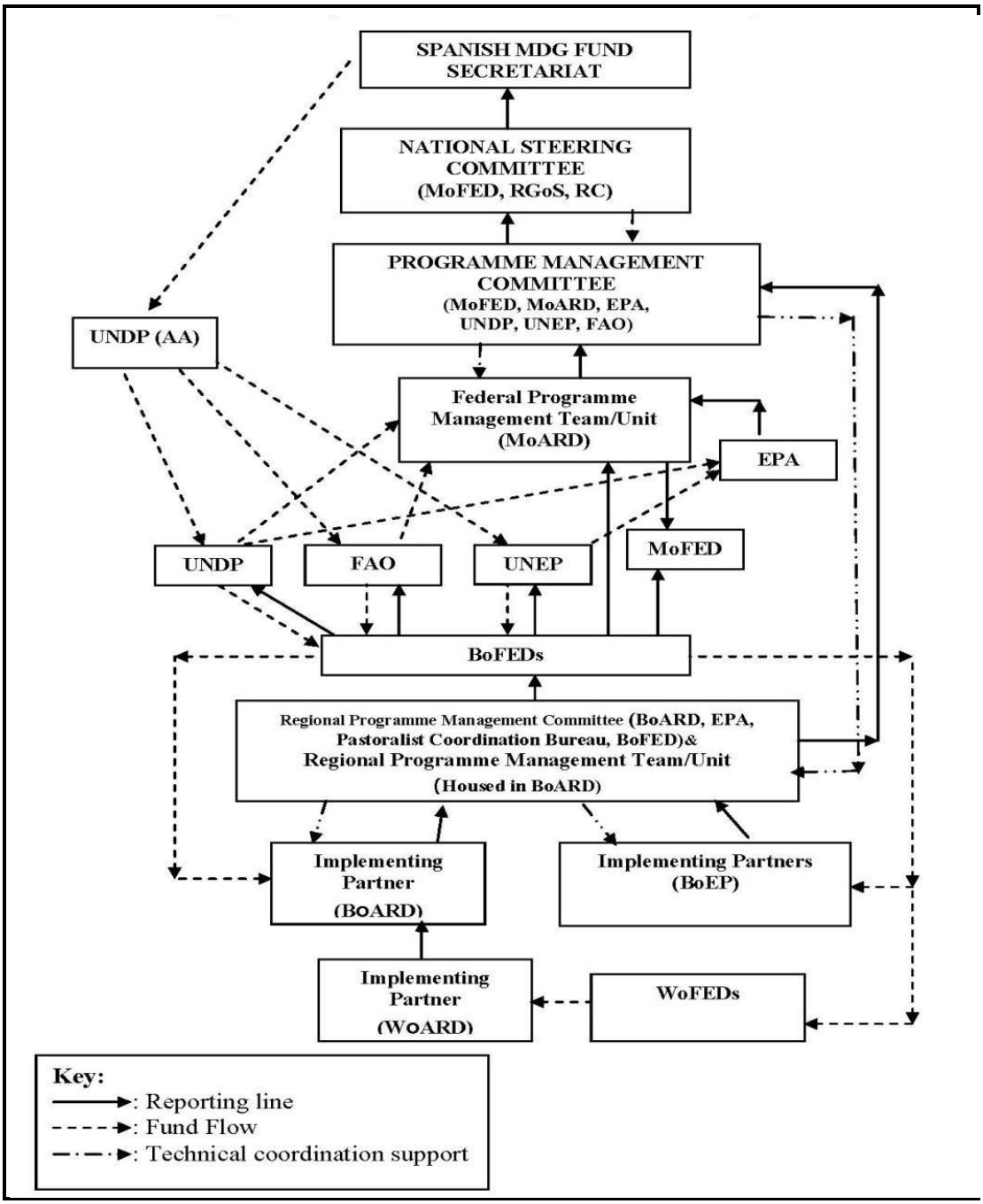
Baseline

No overall baseline study was included in the programme design (only as a narrow Activity under Output 3.1: Climate sensitive needs identified, assessed and priority interventions agreed – budget $15,000), thus none was conducted at the start of the programme. However, as study entitled the "baseline" was carried-out by a national consultant in August 2011 (over a year after the JP started). Implementation of this baseline study involved running of a course to train assistants to then collect the required data in each kebele / PA. A wide range of short-comings can be noted in the baseline study (see Section 3.5); it is disappointing that none of the experts from the IPs and EPs did not identify and correct these in the planning.

Programme Coordination

The overall coordination of operation of the programme is outlined in Figure 1, which links the UN agencies with the GoE agencies which are responsible for the implementation of activities.

Figure 1: Management and Coordination of the MDG-F Environment Joint Programme



Source: MDG-F Ethiopia Environment Joint Programme Document

The coordination system was highly complex.

All five MDG-F joint programmes in Ethiopia have one National Steering Committee (NSC), which provides oversight and strategic guidance to the joint programmes. It provided all the programmes with a platform for aligning and harmonizing leadership and approves joint programme documents before submission to the Fund Steering Committee. On April 28, 2011 the High Level Steering Committee (HLSC), which oversees the UN reform agenda in Ethiopia and implementation of the UN Development

Assistance Framework (UNDAF), made the decision to merge the NSC with the HLSC. Like the NSC the HLSC met twice a year and was co-chaired by the State Minister of MoFED and the UN Resident Coordinator (RC). In addition to the Spanish Ambassador, the HLSC included participation of the Ministry of Foreign Affairs, the Ministry of Federal Affairs, the Ministry of Agriculture, the Ministry of Health and the Ministry of Women, Youth & Children; six Representatives of the UN Country Team, including the three participating UN Organizations in the One UN Fund, also representatives of three bilateral donors (UK, Norway and Spain) as the lead donors providing financial and technical support to the UN reform agenda in Ethiopia.

The Programme Management Committee (PMC) provided operational coordination to the JP. The PMC consisted of representatives of the Resident Coordinator's Office (RCU), the participating UN organizations of the JP (UNDP, UNEP, FAO) and the relevant implementing government counterparts (MoA, EPA). An important role of the PMC was to ensure the synergy of the different JP components, together with the participating organisations. The primary function of the PMC team was to monitor the progress of the JP's implementation (e.g. joint monitoring visits). The team was supported by a professional Programme Coordinator (PC) and the Programme Coordination Office (PCO), which was hosted by the MoA. Programme Management Teams (PMT) were been set-up at the regional level (i.e. 4 for the JP). These were technical and management teams, which monitored programme implementation through technical backstopping support to the implementation teams at woreda levels. PMTs had their offices in the BoARDs/regional environment agency/pastoralist coordination bureaus and were supported by a professional Programme Focal Person.

The PMTs are composed of representatives from BoARD, Regional Environment Agency/Pastoralist Coordination Bureau, BoFED, Bureau of Water and Energy, Bureau of Health, Women's Affairs Bureaus and the Regional Programme Focal Person. In addition to technical functions, the team consolidates sectoral reports and forms the BoARDs coordination mandate. The regional PMT compiles and submits narrative JP reports to BoFED.

Below the regions, the six districts in the four regions are supported by six recruited Programme Officers (PO), who work with woreda-base Programme Implementation Teams (PITs) and coordinate with the Regional PMT and the PCO on programme implementation issues. [Annex 9 provides a list of key individuals in the JP organisation.]

Mid-Term Evaluation

A Mid-Term Evaluation (MTE) of the JP was undertaken by an independent consultant in early 2012. The international consultant met with all key JP personnel (MoA, EPA, UNDP, UNEP and FAO), also MoFED and visited JP pilot kebele / PAs in Somali and Oromia to meet with PMTs and PITs.

The MTE noted that programme start-up had been delayed, due to undecided initial ownership and a slow programme implementation process (amounting to about nine months). [It must be acknowledged that it has been one of the general lessons of the design of MDG-F JPs that setting-up of such inter-sectoral programmes which require strong coordination is very time consuming, thus the delay for this programme is not unusual.] In addition the delay has been exacerbated by a significant lag in the programme implementation, resulting from the programme's design and the delays in budget transfers particularly to the IPs.

It was reported in the MTE that "Programme Management Committee (PMC) meetings and technical meetings are not institutionalized for a closer follow-up of the daily implementation and the programme coordinator gets only incomplete and sporadic information of these meetings".

Furthermore, the MTE "had the impression that there is no efficient communication system among the stakeholders, especially between upper and lower programme levels (PO-PMT-PCO), for providing all participants with real-time information for decision-making and knowledge transfer".

The evaluator concluded that the delay in start-up was "significant" and made it "highly uncertain that the activities can be implemented and the results achieved within the original time frame". He concluded that a review workshop be conducted to develop and implement an improvement plan, also that there was a need for strengthened joint field monitoring and technical backstopping.

The MTE identified that the program coordination office (PCO), "in its operational sphere between UN agencies and government agencies lacks the authority and assertiveness to take immediate action to eliminate revealed shortcomings of the programme". The MTE recommended that "the efficiency of the PCO should be reviewed with regard to its mandatory power and the decision-making authority for the joint programme".

The MTE noted that the authority of the PCO was very limited. Initially the office was poorly furnished (no staff allocated, no logistics in terms of transport, no budget allocation for M&E activities). By the MTE (early 2012), additional full time government staff (cashier, secretary and messenger) for the PCO have been employed.

Post MTE Monitoring

The MTE was clearly the catalyst which in the end has ensured the success of the programme, as the MTE report clearly galvanized the IPs and EPs into action. Very soon after the report was published, a major joint re-programming exercise was undertaken, the aim of which was to speed-up implementation of the JP's planned activities in an effort to achieve as many as possible of the planned outputs and outcomes within the JP period. Notably it was agreed during re-programming that monitoring and technical backstopping should be increased and subsequently two field monitoring missions were mounted in July 2012 (one to Somali and Oromia Regions, the other to Afar and SNNP Regions), each including staff from the IPs and EPs (apart from UNEP on the Afar and SNNP mission).

Final Evaluation

The Final Evaluation is being undertaken by an independent international consultant[14], involving an extensive field mission to visit all four regions (but not all woreda) included in the JP[15], meetings with region-level PMTs, woreda-level implementation teams and Programme Officers, also at Federal level, members of the PMC, the PC and staff of the IPs and EPs. The planning and support of the final evaluation clearly had joint support – although to ensure independence, IPs and EPs were not present in the majority of meetings.

It was reported in the MTE that "Programme Management Committee (PMC) meetings and technical meetings are not institutionalized for a closer follow-up of the daily implementation and the programme coordinator gets only incomplete and sporadic information of these meetings". Furthermore, that the MTE consultant "had the impression that there is no efficient communication system among the stakeholders, especially between upper and lower programme levels (PO-PMT-PCO), for providing all participants with real-time information for decision-making and knowledge transfer". However, at Final Evaluation it was absolutely refuted – as the Programme Coordinator acts as Secretary of the PMC and all POs stated categorically that they were in good regular communication to regional and federal levels.

[14] A national consultant was also recruited to support the IC, but after a week was unable to continue in the role due to personal circumstances

[15] Accompanied in most cases by staff of the IPs and EPs

As was the case at the MTE, stakeholders interviewed in the Final Evaluation assured that the JP's management and coordination set-up was sufficient and it is clear that the NSC, PMC and PMT are in place and reasonably functional. The regional BoFED and the implementing partners report there is a good relationship and cooperation with MoFED and MoA.

Following criticism at the MTE, it is clear that the efficiency of the PCO has been reviewed and improved with regard to its mandatory power and the decision-making authority for the joint programme. However, the coordination of programme management is in many respects constrained as the JP agencies (UN and Government agencies) have their own functional autonomies and are ultimately accountable to their respective supervising units, which are beyond the programme's managerial authority.

The regional and federal teams compiled details of programme accomplishments, which provide evidence of the actual activities completed for each Outcome, however, wider programme impacts (towards woreda, regional and federal / MDG targets) cannot specifically be measured, due to the inadequacy of the baseline.

Other issues

The development challenges stated in the programme document are clearly inter-sectoral and that the actions required to address them fall within the areas of comparative advantage of more than one UN agency. At this final evaluation stage, it is concluded that despite certain limitations and difficulties during implementation, the joint programming approach was clearly the best option to respond to development challenges stated.

The IPs have to a fair extent brought together their differing areas of skills and expertise to address the development challenges in the pilot kebele / PAs and have raised the awareness at the woreda and regional levels of the synergies and win-win benefits of the inter-sectoral approach.

3.2 Process Level of Joint Programme

A. Efficiency

Extent to which resources/inputs (funds, time, human resources, etc.) have been turned into results

Early in the JP, clearly some aspect(s) of the JP's management model (i.e. instruments; economic, human and technical resources; organizational structure; information flows; decision-making in management) were not efficient, as there was a delay of 9 months in start-up.

The JP's document states that the Ministry of Agriculture (MoA) was to be lead Implementing Partner (IP), but as the Environment protection Authority (EPA) has been assigned the lead national role in climate change (CC) matters, protracted discussions took place to decide whether EPA should assume the role. It was reported to the Final Evaluation (FE) that the final decision that indeed MoA should lead was made based on the fact that EPA do not have the decentralised structure of MoA, notably staff at the kebele / PA levels. The delay has resulted in many activities being left until the very end of the programme, which has put excessive pressure on all those working on the JP. However, it did catalyse discussions on inter-sectoral approaches within the Government of Ethiopia, which should bring benefits in the future.

Work finally began on the JP in July 2010, however, the MTE in early 2012 found that there had been many delays in implementation, particularly in Outcomes 2 and 3, while in comparison Outcome 1 activities were well underway.

Implementation of an inter-sectoral programme in any country is a challenge – to which the design of the MDG-F added the complexity of coming within the framework of UNDAF and the "Delivering as One" agenda, involving three UN agencies (UNEP, UNDP and FAO), variously providing technical support for the implementing partners. Technically it is absolutely clear that involvement of MoA and EPA was vital and there have been benefits in the synergies, as EPA has greater expertise in relation to climate change – both adaptation and mitigation, while MoA has expertise working with pastoralists. MoA have taken the lead in the regions / woreda and kebele, in awareness raising / capacity building (Outcome 2) and "on the ground" activities (Outcome 3), while EPA have focused their activities to the higher level mainstreaming of CC adaptation and mitigation at federal and –national (regional) levels (Outcome 1). UNEP's comparative advantage in Ethiopia relates to the activities of Outcome 1, thus this is the area on which they have focused. Similarly, UNDP's comparative advantage is in capacity building, thus the JP was designed that their involvement has been in Outcome 2 and FAO with the assessment of needs on the ground and IGAs.

However, each of the three involved UN agencies has its own regulations and process requirements. The lack of harmony of regulations contributed to a cycle of delays resulting in the need for corrective actions, loss of momentum in programme execution and in ineffective programme implementation, certainly prior to the MTE. FAO particularly had to change their financial system for the programme, to become aligned to the JP system, which had been the UNDP "norm", the so-called Pass through Method (UN, 2011). However, after early issues, at FE (as at MTE), the regional BoFEDs and the implementing partners reported there is a good relationship and cooperation with MoFED and MoA. In some cases, where delays were affecting activities which were season-dependent, or payments of PO salaries, woredas used their own budgets then recouped the funds once the UN agency released a budget (see details in Section 4.5).

Involvement of the three UN agencies reportedly added extra work for the regional / woreda level implementers, due to their having to report to the different UN agency for different activities (i.e. either UNDP for Outcome 2 or FAO for Outcome 3).

However, on balance, the FE established that implementers found it very helpful to have both UNDP and FAO providing them with technical support (UNEP worked only with EPA at federal level); so on balance during the FE they concluded that the additional work generated was worth-while.

Regional FAO staff met during the FE (Somali and Oromia Regions) seemed utterly committed to contributing to the JP and had sound knowledge of the programme and its activities in the pilot kebele/ PAs of their respective regions. However, during the FE, FAO staff at federal level was particularly critical of the JP design, stating that the design did not allow them to give their normal level of technical support (at least 20% of fund transfers) – and that "transaction costs had been internalized by the agencies".

For reasons which are not clear – perhaps due to poor communication and / or lack of awareness, FAO's technical expertise has not been used to maximum extent possible on the JP. FAO elsewhere in Ethiopia (even in adjacent kebele to the JP pilot woreda) are implementing pastoral field schools (either with GoE or NGOs), training master trainers to train local facilitators to work closely over a period of time with groups of pastoralists on a wide range of issues (including NRM and CC), also farmer business schools to link farmers (individuals and / or groups, including cooperatives) to markets. These experiences do not seem to have cross-fertilised the JP. Further, FAO in Ethiopia claim experience in setting-up community tree nurseries – yet do not seem to have collaborated to address the issues faced by MoA at woreda levels in the JP nurseries (e.g. in Harshin woreda). FAO, with funding from UNEP and the GEF, testing in

various pilot countries have devised the Local Approaches to Degradation Assessment (LADA)[16], in which land users are trained to make assessments of their land (including rangeland) and using simple indicators monitor changes following adoption of a range of sustainable land management technologies (such as enclosures). It is a missed opportunity that this approach was not used to monitor sites where JP rangeland management activities were being undertaken, nor around the permanent water points which the JP has established, to ensure they do not catalyse unwanted accelerated degradation (Stockton, 2012). EPA has produced a publication on CC adaptation and mitigation for Ethiopia, a document which includes 14 recommended technologies (ranging from restoring degraded areas with trees, planting bamboo, making ethanol from sugar cane, biodiesel from jatropha, using photovoltaic panels and smart cars). Few of these focus on options for pastoralists and no mention is made of the recent FAO publication (FAO, 2010b – entitled Livelihood Systems in Drylands in the Context of Climate Change: Inventory of Adaptation Practices and Technologies of Ethiopia), which includes for example:

- recommendations for tree species for Ethiopian drylands in the context of CC;
- options for community-based development and commercialization of NTFPs in dryland areas in relation to adaptation to climate change;
- advice on livestock improvement to reduce GHG emissions (e.g. increasing off-take).

There is a further area where the inter-sectoral ambitions of the programme have not worked to best effect. Outcome 1 reports / publications are clearly relevant to the staff and beneficiaries based in the regions, woreda and kebele – but, as these are produced by EPA and distributed via their offices, the FE found that they have not always been circulated and benefited the Programme Management Teams (PMTs) at the regional level and the woreda-based Programme Implementation Teams (PITs) at MoA bureaus.

The selection of pilot sites for the JP, genuinely focusing on the most needs areas rather that to achieve "quick wins" has inevitably reduced impact on the ground, but has been effective in providing results which demonstrate the need to nuance design of scaling-up and / or future programmes (see Sections 3.4A and 4.5).

Communications and Advocacy Strategy

In 2009 the MDG-F Secretariat elaborated an advocacy and communication (C&A) strategy with the aim of helping the MDG-F advance its main goal of accelerating progress on the MDGs and related goals while advancing collaborative UN efforts. It responded to the demonstrated need to strengthen citizen's participation in development efforts and have clear advocacy interventions that push for more inclusive and responsive public policy and practice.

It was also suggested that individual Joint Programmes should have clear communication and awareness interventions that are defined by the programmes desired policy impact. The MDGF Communication and Awareness Strategy's overall Goal, Outcome and Outputs to be implemented at the programme level were:

Overall Strategic Goal

- Accelerate progress on the MDGs by raising awareness, strengthening broad- based support and action and increasing citizen engagement in MDG related policy and practice.

Outcome

- Increased awareness and support for the MDGs both at policy and general public level.

Outputs

- Strategic alliance with media for advocacy and communication;

[16] ftp://ftp.fao.org/docrep/fao/010/ai555e/ai555e00.pdf

- Key dates and events are used to raise awareness and link the advocacy efforts of various partners;
- Link with selected civil society organizations for MDG related adaptation advocacy;
- Awareness materials designed (magazine, human interest stories, tv programmes, radio spots) and distributed along appropriate channels.

The JP's Communications and Advocacy Action Plan (C&A) (published in April 2012) had the following key objectives at programme level, which were to be fed into national advocacy plan:

- To educate and raise awareness concerning the CC adaptation among all stakeholders;
- To provide a public participation mechanism and facilitate buy-in by the stakeholders;
- To provide appropriate communication tools;
- To continuously communicate adequate and useful information about CC change adaptation and its outputs to the stakeholders;
- To enhance stakeholders understanding of the issues in CC change adaptation for informed decision making and adoption of corrective measures, good environmental practices.

The C & A Strategy and Plan were realistic yet comprehensive given the short time-period of the JP, notably including:

- a media field visit to the 6 program implementing woredas through public relations office of MoA;
- hosting regular informational sessions with press, radio (local FMs), and TV journalists to brief them on MDG development issues in relation to CC adaptation programs;
- broadcasting radio programmes on cc adaptation issues in different JP implementing area languages;
- promotion of CC adaptation by integration and articulation at with key dates and events, notably a Mass Run planned by an organization called Green Promotion;
- preparation and dissemination of brochures with key messages on cc adaptation;
- developing links with a selection of key higher education institutions in the regions involved (Semera, Jijiga, Haramaya and Hawassa) for strategy campaigns for CC adaptation program;
- local awareness raising (inter alia film show, religious leaders' involvement, community leader's involvement) in the JP regions in relation to CC adaptation/ mitigation program.

The chosen media seem well-suited to targeting the communities of the pilot kebele / PAs and wider regions, where rates of literacy have been shown in programme studies (notably the IGA study) to be only around 10%, yet ownership and use of radios is reportedly very high.

The FE was unable to determine the content of certain materials etc. In recent years, many materials have been developed to assist in raising awareness of CC and options for CC adaptation / raising adaptive capacity, including by UNDP, UNEP and FAO (in Ethiopia and their respective HQ and regions). It is hoped that the JP materials did not "reinvent the wheel", but rather make use of the array of materials and advice which already exist (e.g. IIED, 2009; ODI, 2011) – with adaptation to the Ethiopian context and translation where necessary into local languages.

Programme Transport

The provision of transport facilities is crucial for the implementation and monitoring of programme activities and to ensure the quality of execution.

The JP design only allocated transport for woreda-based Joint Programme Officers and that in the form of motorcycles. The motorcycles had not been released for the focal persons in the six implementation woredas by the time of the MTE and even at FE, several still were held in Addis Ababa as, since January

2011, the motorcycles are not exempt from customs duty. The regions affected by this tax did not allocate the expense in their budget.

The JP woreda have assisted in programme implementation by making available alternative motorcycles, but again, this has had knock-on effects on activities, as these motorcycles are not always available when the JP POs need them.

In trying to be inclusive, provision only of motorcycles for PO transport limits the range of people willing to undertake the role – and may have contributed to the high turn-over of staff (see Annex 9). Only one of the six POs is a woman – and she had to find a man willing to driver her to JP sites on the woreda motorcycle as it would not be culturally acceptable for her to drive herself.

Ideally, regional focal points should have had independent transport – as their offices were in some cases several days drive from the implementation woreda and kebele / PAs.

B. Ownership

Effective exercise of leadership by the country's national/local partners in development interventions

The delay in start-up of the JP (see Section 3.2A) indicates that there were initial issues regarding leadership of such a complex inter-sectoral programme, which was unfamiliar to the GoE agencies. This seems to have continued in the early months of the programme, in reality until the issues were systematically analysed by the independent consultant in the Final Report of the Mid-Term Evaluation (MTE), in which it was advised that a re-programming exercise should be undertaken urgently by all partners.

The re-programming exercise seemed to have catalysed a much greater sense of leadership and ownership at the federal and regional levels, with for example greater participant in monitoring by the UN agencies (notably the two monitoring missions mounted by all partners in July 2012).

Targeted populations and pilot woreda authorities have taken a very active role in the programme, with officials at the decentralised woreda level feeling that the new inter-sectoral approach was exactly what they needed and expressing the intention to continue and extend such co-ordination beyond the life-time of the programme. Many beneficiaries themselves appear to be taking an active role, encouraged by participation in the various awareness raising / training courses in Outcome 2 – also in relation to co-operative (Outcome 3), re-vitalizing existing or forming many new management committees (for rangeland, improved water sources, livestock crushes etc.).

This good level of federal / regional ownership and high level of local ownership undoubtedly has contributed to the efficiency and effectiveness of the JP implementation. Notably, the MTE found a serious lack of progress, particularly Outcomes 2 and 3 – but following the re-programming and increased ownership, there has been an amazing turn-around in progress.

3.3 Results Level of Joint Programme

A. Effectiveness

Extent to which the objectives of the development intervention have been achieved

The JP contributed to the attainment of the majority of the development Outputs and are evaluated as highly likely to attain the Outcomes expected in the programme document in the pilot kebele / PAs (see Annex 10) and contribute to the MDGs, the JP goals, the UNDAF, indicators of the Paris Declaration and national priorities.

The achievements, particularly under Outcomes 2 and 3, have mostly been achieved in a very short period (ca. 1 year) since the MTE, which was highly critical of delays in implementation and which catalysed a re-programming and closer monitoring of the entire JP.

Due to the fact that many of the on-the-ground activites have only recently been completed (e.g. digging of small trenches across the range in Harshin to reduce run-off, also rangeland enclosures, clearance of Prosopis and other IASs, also range re-seeding in all regions), it is not as feasible to assure the effectiveness and / or sustainability of the interventions than would have been the case had the JP been longer or had implementation started on time. However, all community members in the participatory meetings were very, very positive about the immediate benefits they can see on the ground and also the medium to long-term benefits of the efforts of the "Spanish Programme"[17].

There were clear synergies within the programme design, which mean that there have been synergies in the results, for example key community members in areas which now benefit from the on-the-ground activities (under Outcome 3) also attended awareness raising / capacity building / training (under Outcome 2) (see numbers attending in Table 4) thus have a much better understanding of, for example, how to manage the permanent water source, or the improved rangelands.

Full details of the activites under each Output and Outcome are provided in Annex 10, the following provides details of some of the key achievements.

<u>Outcome 1</u>: Climate change mitigation and adaptation options for pastoralists mainstreamed into national, sub-national and district development frameworks.

To attain the Output "climate change related risks / vulnerabilities of the pastoral communities at national, four regions and six districts identified and assessment report produced", IT materials were provided to 4 regions and 6 districts to strengthen exchange of climate information. Work was also carried out towards establishing a Climate Change Clearing House Mechanism to exchange information on climate change adaptation at national level.

Various activities were conducted towards the Output "CC related federal and four regional states policy and strategy gap analysis report produced and policy proposal prepared", including preparation and publication of a national, four regions and six districts CC strategies and action plans.

To achieve the Output "Federal, four regional states and six districts CC adaptation/ mitigation strategy, communication strategy, action plan prepared", a communication strategy and public awareness toolkits were prepared and a stakeholders' consultation undertaken to improve the contents and quality of the information strategies and action plans

Under the output "mainstreaming methodology, tools/manuals/indicators/ training manuals developed", toolkits of different appropriate adaptation technologies and practices (in English, Amharic and other local languages) were prepared, published and disseminated.

<u>Outcome 2:</u> Enhanced capacity of government agencies and respective pastoralist community institutions to effectively respond to the climate change risks and challenges at all levels.

Training of Trainers courses were held for federal and regional experts/specialists on CC adaptation planning, implementation, M&E and on resource related conflicts prevention and management towards the Output "ederal/regional/ local practitioners and community members enabled to plan/ manage CC adaptation and handle resource based conflicts".

[17] They used this phrase in conversations otherwise conducted in Amharic or another local language

To achieve the Output "existing capacity of pastoral communities' institutions and relevant government institutions assessed, gaps identified and needs defined", an assessment was undertaken to define the capacity needs of existing pastoral communities, institutions and relevant federal, regional and local government institutions (*inter alia* at Federal Level - EPA, MoA, MoPA, MoWE; in the four regions - BoARD, BoWE & regional EPAs; in the six JP districts - district ARDOs. Subsequently, to address the immediate and critical capacity needs identified, key government and community institutions at four regions (BoARD,BWE,regional EPAs), 6 districts ARDOs were supplied with IT equipment (hardware and software).

To raise awareness of CC adaptation issues, programmes have been broadcast programs in the different JP implementing area languages (including local FM radio & TV).

Training Of Trainers (TOT) for regional experts; training for regional, Woreda experts, Extension Agents by trained regional experts; training for kebele leaders, elderly people, religious leaders, youth and leaders; and training for school teachers has been completed to ensure that the Output "a critical mass of skilled trainees on adaptation programme management and early warning and response systems deployed".

Also under that Output, a consultation workshop was undertaken with pastoral affairs standing committee and other stakeholders in Somali region to initiate and agree on the mode and establishment of local CC pastoral coordination mechanisms. In all the regions, local CC pastoral coordination mechanisms (a body and secretariat) were established, or where they existed, strengthen, also awareness creation workshops were held on better utilization of rangeland resources for community members.

The programme also made a start on the massive task of providing accessible information on CC mitigation and adaptation packaged and disseminated. Information manuals were prepared in electronic form and then soft copies sent to regions for translation into local languages.

Six districts user friendly adaptation early warning and response mechanism (indicators, manuals, working procedures for info exchange) were produced and presented. These are now being operationalised.

Outcome 3: Pastoral community coping mechanisms/sustainable livelihood enhanced.

Under the Output to ensure "access to functional water schemes improved on a sustainable basis in selected villages (2-3 kebeles per district) of the six target districts", birkas, cisterns and wells were constructed and water management committees formed.

The JP supported development of systems and technologies that enhance availability of feed resources in selected sites (2 to 3 kebeles) of the six districts, including: area closure for rangeland rehabilitation and reseeding; and control and management of bush and invasive plants. In consultation with FAO, MoA and PCO, selected community members, regional and woreda experts made visits to neighbouring areas where SLM technologies were being tested. Six tree nurseries have been established and batched of seedlings of locally appropriate seedlings plant out, some in and around homes / villages (for fruit and shade), others more widely across the rangelands.

A participatory assessment was conducted on the viability of arrange of potential income generating activities – some of which have been taken-up by cooperatives (see below). The report is expected to be valuable to provide guidance to MoA woreda staff in providing advice in the future.

A number of livestock-related initiatives have been started to increase livestock productivity and access to better market. This has been in parallel with training in alternative income generation. The training

was provided cooperative board members on cooperative principles, book keeping, business planning etc. Most of the cooperatives established thus far focus on livestock fattening and marketing, although others are investigating options in milk and milk products, also selling locally collected gums and resins. The cooperatives have been supported to become legally registered, provided office space, materials, necessary documents and start-up funding (in each cooperative's bank account). The woreda marketing officials confirm that they will be able to continue to support these new ventures.

The funds provided by the JP for cooperatives are to form community development funds for each woreda established specifically to facilitate alternative income generating activities. The cooperatives are legally required to repay their loans to the fund (which will be administered post-JP by the woreda) within 3 years and then this money will be used to support new cooperatives. The design of each community development fund management system has been agreed in dialogue with community and local authorities and importantly training provided for community leaders on management of fund.

To further support IGAs, the JP has trained 325 women and men members of the communities on viable schemes (as identified by the JP study) to help them acquire income diversification skills and reduce their total reliance on livestock.

Animal health clinics and vet health posts have been rehabilitated, refresher training conducted with vet staff (woreda staff and regional staff) and veterinary drugs and equipment re-supplied to existing vet clinic/posts to make them functional. The paravets met in the FE note how valuable this is to help them cope with changes in disease pressures due to CC.

Discussion

Evidence of these synergies was clear in the participatory meeting held on 16/01/13 close to a new, project-funded large concrete, corrugated iron covered birka in Farahliban kebele, near Harshin in Somali Region. The all-male WATSAN committee had just opened the birka for households to access water (it filled with rain in Nov 2012, shortly after completion). The community had agreed that water from the JP birka should only be for human use (water for livestock is available to buy from commercial birka owners around the kebele) and have imposed a 50l/day/household limit to help ensure supplies last until the next rains. [When asked why there are no women on the WATSAN committee, the members responded that the local women had not been able to attend the JP training – but before any follow-up question stated that they would train the women to be involved, as the main beneficiaries (formerly walked 6 hours per day for water).]

The two members of the rangeland committee which the JP supported (i.e. paid community members to work on the site) to clear an area of communal range 6 months ago who were met during the FE in Oromia stated that already community members had begun clearing adjacent rangeland of IAS as they saw the improved grazing produced in the demonstration area and recognised the benefits without need of further payment. This indicates that the JP has helped the community realise that they are capable of doing things about the degradation themselves – although other communities would perhaps need to visit such sites to assure them what is possible through self-help.

The documents in local languages produced under Outcome 1 of the JP on climate change adaptation will assist woredas and regions continue to help communities to adapt to CC into the future. Having said this, no pastoralists actually mentioned that the activities they were undertaking under the programme "on-the-ground" were for climate change adaptation. However, at higher levels there is clear understanding of the links – and the FE concludes that the fact beneficiaries did not mention it is not important – the pastoralists are very enthusiastic about the "on-the-ground" interventions, including the potable water sites, improved vet services and the cooperatives, which are most important.

At higher levels, there remains a pressing need to raise awareness among policy and decision makers of the likely impacts of climate change, particularly on pastoralists and to ensure that all GoE policies, strategies, projects etc. include adaptation and where possible contribute to mitigation. The EPA publications from the JP (also the AAP and others) make significant contribution to this effort – although for example the document produced on adaptation and mitigation has not been focused on pastoral areas, thus includes a wider range of options (e.g. biofuel from sugar cane and electric-powered vehicles) – and omits key livestock-related options (e.g. changes in herd species composition, general herd improvement and increased off-take. However, the State Minister and others at national, regional and woreda levels in the MoA assured that the programme had demonstrated best practices for climate change adaptation (e.g. in rangeland clearing, construction of cattle crushes for AI and disease control, improvements in vet. posts and development of local markets to help pastoralists deal direct with buyers) which they plan to continue to develop into the future.

Water Points

Many of the "on-the-ground" activities aimed to ensure provision of clean potable water in pastoral areas. In communities visited, these are universally welcomed and save women and children having to walk for many hours each day to collect water. However, there remain questions regarding whether, from the point of view of sustainable use of drylands ecosystems, this is wise. Stockton (2012) [in common with many others, *inter alia* FAO, 2006, FAO 2009a, IIED 2008, IFPRI, 2010] note that "water developments …. tends to promote growth of villages in previously uninhabited drylands" … "villagers' resident populations of livestock cause environmental degradation and constrain the mobility required for successful and sustainable pastoralism to function". Indeed Stockton (2012), and others (e.g. FAO, 2009a) argue that water developments are "destroying the environment and accelerating the cycle of drought emergencies". Ideally, pastoralists should be encouraged to maintain their traditional mobile livelihoods, at least with herds moving to take advantage of areas of good grazing across wide areas of communal rangelands, perhaps with women and children remaining close to the water sources all year and men with the herds retreating to such areas during prolonged dry periods. This would avoid overgrazing of pasture within a day's walk of the water source – and also degradation of rangelands beyond, as maintenance of these ecosystems is ultimately dependent on grazing (originally by wild herds, now mostly domestic livestock) to manage, for example, invasion of rangelands by alien species (IAS).

Tree Nurseries

The multiple benefits of trees, including for climate change adaptation (shade and shelter), mitigation (above and below ground carbon sequestration), provision of wood for fuel, building etc, also NTFPs (including fruits, medicines, gum, resin, fodder and forage) are well-known. Furthermore, all pastoral areas are being degraded due to deforestation. Consequently, it was not surprising that the pilot areas were all keen to increase tree planting by setting up tree nurseries. Indeed one focal person reported to the FE that "pastoralists like to plant trees".

However, these pastoral areas are harsh environments, in which it is difficult to establish a successful nursery – and also very difficult to ensure a reasonable survival rate for the seedlings produced once transplanted. These issues were compounded as all POs and FPs noted that nursery budgets in the JP were inadequate.

Tree nurseries were reportedly established in all regions (6 of the planned 8 – see Annex 10). During the Final Evaluation, visits were made to the sites at Harshin Woreda (Somali Region) and Saba-Galena in Teltele Woreda (Oromia Region).

The site at Harshin was located at a very challenging site, on a raised area of land which was close to a new birka (for water supplies – but without pipes to move quantities of water for regular watering) but

lacked shelter and was thus very exposed to sun and wind (damaging the shading which had been erected). Reportedly many seedlings had been given to communities for planting in the rangeland – but apart from a small number of growing trees in Hafufley village, where they could be easily watered regularly, no others were seen. Many seedlings remained in the nursery awaiting the onset of the rains for transplanting – but these seemed "pot-bound" and not well watered. It seems unlikely that many will survive being planted out, even if the coming rains are good. No monitoring system was in place to check on the survival rate in the challenging environment of the Harshin Woreda of seedlings from the nursery.

The Saba-Galena in Teltele Woreda was in a good location, close to a perennial river with some trees providing shade. However, it appeared now totally neglected, overgrown and being grazed by goats. Reportedly, seedlings produced at the site have been given to communities. During the Final Evaluation ca. 10 trees from the nursery were seen in Sarite PA (a small village), including moringa and paw-paw. The beneficiaries were very pleased with these trees as previously they had no access to fruit and requested more seedlings during the FE FGD. According to that region's focal person, other tree seedlings had been "planted out on the range", with no indication that they had been planted in pits of compost / mulch applied. No assessment of the survival rate for the seedlings had been made.

The future prospects for these nurseries seem in doubt, as no local management committees have been formed. The processes involving and motivating the pastoralist are very important – these should be "people's nurseries". There is a clear need for more technical inputs to ensure their sustainability – either from FAO (federal, or HQ) or perhaps ICRAF.

Questions also need to be asked on the appropriateness of handing out tree seedlings free to communities and individuals, even in the pilot kebele / PAs under the JP as repeatedly it is found across SSA that if given free, seedlings are not care for as well as if recipients are asked to pay even nominal amounts, or in exchange for labour in the tree nursery.

Alternatively, assisted natural regeneration could be encouraged, as undoubtedly the soils of the rangelands contains tree seeds – which will germinate in enclosures or even small areas from which animals are excluded – then could be nurtured.

EPA website

Under Activity 1.1.1, EPA was to establish and/or strengthen Climate Change Clearing House Mechanism to exchange information on climate change adaptation at national level and develop Ethiopian Climate Action Registry Information System. The Ethiopian Climate Change Registry Facility was reportedly developed by a consulting firm (Cybersoft P.L.C) to serve as the Climate Change Clearing House Mechanism. Commendably, it was developed by strengthening the existing EPA web site (www.epa.gov.et). However, as detailed in Section 4.5, this site does not work as the three staff trained to manage it have all left. It is forward thinking to have included development of a website in the activities of any programme or project to benefit regions / woreda / beneficiaries in Ethiopia, but access to the internet is geographically limited. The loss of trained staff was also quite predictable, as there is inevitably a good market in the private sector for trained IT experts – the "brain drain".

As recorded in Annex 10, at the start of the FE (on 12/01/130, the website was not working. On 05/02/13, the EPA website was working but the Climate Change Clearing House page (www.epa.gov.et/ClimateClearingHouse/default.aspx) only showed information on Persistent Organic Pollutants (POPs), which does not relate to CC. Unfortunately the Final Evaluation, was therefore unable to review the content and come to any conclusions about its usefulness.

Reportedly copies of reports etc. produced by the MDG-F JP will be uploaded to the site to increase access to programme results – which is very laudable.

EPA staff reported that the 3 staff trained to manage the website has left the service, but recruitment is underway for someone to manage the site. Staff turn-over is a serious issue, as there will undoubtedly continue to be a demand from the private sector in Ethiopia for staff trained and experienced in working in IT, thus there is likely to be an on-going problem for GoE to try to manage sites which are more complex than just pointers making links to other websites (such a website could be useful itself – for example directing users to the UNFCCC website, advice on climate smart agriculture from FAO, IIED's community approaches to CC, or etc.).

Based on the information provided by EPA, it can be concluded that the site will be relevant for regions, but of limited value at woreda levels or kebele / PAs / communities / individuals, as the woreda offices do not (yet) have access to the internet.

The JP has provided a number of interesting results differentiated by gender and geographical location (see Sections 3.4A and 4.5), which should be used as a guide in development of future programmes – to ensure they are more nuanced to the location situation.

B. Sustainability

Probability of the benefits of the intervention continuing in the long term

The sound design of the JP (Outcomes / Outputs / Activities – see Annex 10 for summary) has greatly contributed to the current situation where it seems highly likely that the benefits of the programme will continue into the medium and optimistically long term.

At the Federal level, the State Minister of the Ministry of Agriculture was particularly appreciative of the JP's capacity-building interventions (Outcome 2) and indicated that the JP has directly ensured that government and local institutions at all levels to have:

- An awareness that the current situation needs to change;
- A sense of being in a position to change that situation (having agency);
- Access to appropriate information about the different options that could be used – individually or in combination – to solve particular problems;
- Access to resources to test new things and a safety net to fall back on in case of failure; and
- An enabling environment that encourages and promotes innovation.

The Federal, Regional, Wereda and local institutional capacity and service delivery have been "enhanced through delivered training/ workshop and equipment and materials supplied".

MoA acknowledge and that the program has been able to mobilize and use a very large number of professionals working at various levels of government governance structure and has created sense of ownership at various levels of governance structure and pastoral community, which has ensured the sustainability of Outcome 3. Further, the community mobilization and continues community consultation and reorientation about the program objectives, expected outcomes, outputs and activities are the corner stones, which can significantly contribute to the scaling-up of the program accomplishment under outcome three and can be scaled-up in similar pastoral context.

The "MoA has planned to incorporate the best practices of this pilot program in the Climate Resilient Green Economy (CRGE). The program is working on documenting its best practices for its scaling-up under the CRGE component. Beside this, the program has already been mainstreamed into national, regional and Wereda development plan and all best practices identified shall be scaled-up by the respective national and local institutions. In this regard, the government is committed to take the leadership in ensuring its scaling-up."

The Environment Protection Authority (EPA) now has at its disposal a number of key documents for use in scaling-up climate change adaptation (and also mitigation), which have very recently been distributed (in digital form) to regions for translation into local languages (under the JP) and distribution to woreda staff for use in future with communities. CC mitigation is not in the tile of the JP, nor does it appear in any other activity. However, regrettably, the mitigation options suggested in the EPA report have been chosen for wider application across Ethiopia (use of biofuels, smart cars etc) than focusing on options for pastoralists, which would include increasing off-take (poor quality long-lived stock are responsible for many more GHG emissions, particularly CH4, than smaller numbers of better fed thus more productive stock).

EPA now also benefits from having the following up-to-date plans and reports for future implementation[18]:

- plans for adaptation to climate change for each of the JP woreda and region (in Amharic and some in English);
- a national level capacity needs assessment
- a draft Climate Change Adaptation Action Plan of Water and Energy Sector.

A website linked to the existing EPA site was designed by an independent local IT company (Outcome 1.1) for the JP as a "Clearing House Mechanism" for climate change. Three EPA staff was reportedly trained to administer the site (up-loading documents etc). However, all these staff has since left EPA and the site is not working. This option clearly is difficult to evaluate as sustainable. Ideally an easier to maintain site should have been designed given the current state of IT in Ethiopia, with pointers to other relevant sites, with a simple to use facility to up-load documents.

The Activities and Outputs of Outcome 2 are highly significant in contributing to the likely sustainability of the interventions, as these were the awareness raising, capacity building and training courses for a wide range of key community-based individuals who now not only have this knowledge themselves, but are in positions and have roles in which they can pass this on to others. Annex 7 provides a full list of the various courses run in each region and numbers of participants. These include "training of trainer" courses, also training of teachers not only from the target kebele but also neighbouring kebele / woreda, to enable them to pass on the knowledge to their many pupils (with very large multiplier effects), courses for cooperative board members, including in administration and book keeping.

At kebele / PA levels, almost all[19] the interventions on the ground (Outcome 3) had been developed in close consultation and support of beneficiaries, and use existing or have developed committees for the management of the interventions (*inter alia:* rainwater harvesting birkas, cisterns, ponds; range closure areas; cooperative boards). Medium to longer-term commitment to the programme by sector Ministries of the GoE at woreda levels was demonstrated by the fact that representatives of the various involved sectors at that level expressed full commitment to the FE that they will continue to provide on-going support for example for the budding cooperatives.

Woreda have Cooperative and Marketing Bureaus, which have given assurances, including through the JP exit strategy, to provide on-going support and advice. They will also be involved in recouping the set-up loans – and reinvesting in new start-up cooperatives, thus benefits will be shared with other community groups well beyond JP closure. Some JP Cooperatives are already advising others on starting-

[18] The final evaluation was not able to determine whether these were all produced under the JP or jointly under the JP and other CC programmes (e.g. the Africa Adaptation Programme and funded by JICA – as reports were provided without title pages)

[19] The notably exception being tree nurseries – see Section 4.5

up new cooperative (e.g. in the Somali Region) and if woreda can (as promised) support these groups to become legally registered), they would become eligible to micro-finance. Most of the cooperatives developing under the JP focus on livestock fattening, with one not yet started on producing milk products. This is perhaps inevitable given the short duration of the programme – and the knowledge and expertise which pastoralists have in livestock; however, to increase the adaptive capacity of communities in the face of climate change and particularly increasingly frequent droughts, diversification is vital. The JP report on income generating activities (IGAs) provides very appropriate gender sensitive guidance, tailored for each region which it is to be hoped the MoA and others use in scaling-up to reduce the high dependence on livestock. One of the cooperatives visited in the FE show exemplary initiative and has begun to diversify – into gathering resin and gum, also bulk buying of food necessities (in this case cooking oil) to re-sell to members below local market price. This level of initiative should be upheld and publicized – and may be explained due to their base being on a main (if very poorly maintained) road.

Community groups themselves indicated that independently of further financial help (the JP paid communities for their labour to clear IASs, construct ponds etc.) they would be willing to undertake more such work as they saw the benefits of the JP action. However, this would have only limited scaling-up benefits unless for example exchange visits or publicity can be funded.

Beneficiaries of water systems note they have agreed to fund minor repairs / maintenance costs – while agreements have been signed with the woreda water sector, which will fund and major repairs. Since the concept is so groundbreaking for pastoralists, it is anticipated that the cooperatives which have been set-up under the programme are likely to be in most need of on-going support.

The inadequacy of the JP's Monitoring and Evaluation (M & E) system (see Section 3.5 below) does raise issues on how the sustainability of the JP's on-the-ground interventions are monitored, as no the JP has not established any qualitative or quantitative monitoring systems for rangeland interventions and environmental impact assessments of water structures.

The JP is certainly replicable and clearly activities are in line with national development strategies / priorities as at every woreda / region / federal meeting the informants mentioned that it is exactly what Government wishes to provide. However, GoE is unlikely to have sufficient funds to scale-up without further donor support.

3.4 Crosscutting Issues of the Joint Programme

A. Gender Mainstreaming [20]

Gender elements in climate change is usually taken to refer to the different ways in which women and men contribute to climate change through their natural day to day livelihood activities and the differing impacts that climate change has on them. This includes different ways that men and women respond to and are able to cope with climate change and the differences in how they are able to move from short term coping mechanisms to adaptation and resilience (e.g. leading to livelihood diversification or total change of livelihoods or change of gender roles (Ongoro and Ogara, 2012)).

[20] Definition – "gender mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programmes and projects". (source: UN Women - http://www.un.org/womenwatch/osagi/gendermainstreaming.htm

Capacities, vulnerabilities and needs are differentiated by gender. Women and men experience crises differently according to their gender roles. They have different needs and interests. Women in developing countries by virtue of their lower economic, social, and political status, tend to be more vulnerable to crises. Furthermore, women's everyday household work and care for their families will be made more difficult due to climatic changes. They may have to travel further for clean water and firewood and spend more time trying to grow and gather foodstuffs in inhospitable conditions. Furthermore, when households experience food shortages, which are an inevitable consequence of climate change, women tend to push themselves to the limits for instance by going without food so that their children may eat albeit at great cost to their own health. In the climate change discourse, the gender approach is best suited to analyze the phenomenon of climate change and gender inequality, their close linkage with one another and the differential risk levels between men and women relating to climate change and vulnerability (ibid.).

The issue of gender vulnerability in climate change for the JP is important because gender differences among pastoralists in property rights and access to information play a major role in impacts of climate change, adaptation and mitigation. Both men and women pastoralists have basic and distinct forms of knowledge and skills, they also have differing gender roles and responsibilities which can be utilized in production, reproduction and trade for community food security. Despite the fact that both men and women pastoralists in the JP regions of Ethiopia clearly experience the same impacts of climate change, the policies and frameworks that characterize the debate too often do not adequately address the unique experiences of women.

The study on income generating activities (IGAs) for the JP differentiated activities suitable for men and women (see Table 3).

Table 3: Income Generating Activities for Men and Women

IGAs assessed to be appropriate for Men	IGAs assessed to be appropriate for Women
Small-scale agriculture	Milk processing
Animal fattening	Small-scale businesses (kiosks)
Sand collection	Establishing flour mills
Harvesting of animal feed	Gardening
Harvesting of water	Collecting incense and gum
	Bee-keeping

Perhaps due to the programme's complexity and geographical distribution of intervention areas, the JP did not specifically include, for example, running separate awareness raising / training / capacity building for women. One of the few possible analyses on gender for the FE was of the number of women who attended the various JP courses is instructive. Overall, Table 3 shows that the JP managed to include 26.8% attendance by women – which is a good achievement, given that some of the target groups are dominated by men (development agents, extension staff and teachers). This participation level rises to 30.9% when calculated based on person days in training. Men dominate attendance at the longer training courses, as women report they find it very difficult to be away from their homes and families for prolonged periods.

There are interesting differences in participation levels between the JP's four regions – with the Somali Region achieving a much higher level of participation by women that any of the other regions on both

measures (36.5% and 43.2%) – while again on both measures, SNNP's participation for women is much lower (14.3% and 13.9%).

Table 4: Gender breakdown of JP course participants

Region	Women	Men	Total no. of course participants	% women attending courses	% women by person days
Somali	325	565	890	36.5%	43.2%
Oromia	197	558	755	26.1%	24.7%
SNPP	60	360	420	14.3%	13.9%
Afar	243	771	1014	24.0%	22.8%
MDG-F JP	**825**	**2254**	**3079**	**26.8%**	**30.9%**

Issues including the suitability of course venues for women (including those with young children), proximity to where families live, timing of events and options for transport are all likely to have contributed to the fact that the majority of participants were men.

Through its innovative design this JP has uncovered clear differences in gender up-take of interventions. Notably, men dominate numerically in both range management and WATSAN committees; however, women (and children) are clearly the immediate beneficiaries of improved water sources (ponds, cisterns, birkas and wells). As they no longer have to walk for many hours daily to collect water for their households, these women beneficiaries have more time for other routine tasks or to take up income generating activities (IGAs).

The communities in the JP have gender roles that are socially embedded and every person is recognized through these roles. This kind of stratification makes adaptation to CC a big challenge to the community and also increases gender vulnerabilities. The men having been traditionally understood as providers seem to feel inadequate as the drought kills their livestock and they are not ready to commit to adapting to new activities (i.e. cooperatives) that might be perceived to be inferior. Notably the cooperative dominated by men (74 of 77 members) visited in SNNP, have bought only 2 cattle and few clear plans to sell them for profit. Some of the women, on the other hand, clearly demonstrate that they are flexible and dynamic, ready and willing to change and accept new roles so as to survive. This is exemplified by the women of the cooperatives in Harshin woreda, in Somali Region, both groups of which are buying, fattening and selling shoats for export – and one group has moved on to buying, fattening and marketing much more costly camels.

The JP attracted few women staff, with currently only one woman in the role of regional focal person (for SNNP) and one woman programme Officer (Telalak Woreda in Afar Region). It is unlikely that future programmes will be able to have a better gender balance among staff unless more suitable options are available, regarding transport – as regional focal people were not provided with any JP transport and POs only with motor-cycles.

B. Inequalities /Poverty Focus

Recent statistics (2011) show that poverty levels across Ethiopia were 29.6%[21]. The focus of the JP on the main pastoral areas of Ethiopia, where it is nationally recognised that levels of poverty are very high

[21] National poverty rate is the percentage of the population living below the national poverty line – source: http://data.worldbank.org/country/ethiopia

by definition means that the JP has a poverty focus. The programme activities themselves were open to all – and no information was specifically collected as to the actual levels of wealth / poverty of the people who benefited from awareness raising / training – or from the on-the-ground activities.

Further information is provided on the communities in the JP kebele / PAs in the JP "baseline study" (see Section 3.5 regarding the study in general). The baseline survey results indicated that 82% of surveyed households reported food insufficiency while 86.3% experience food shortage within the last 12 months (to August 2011), indicative of the low levels of livelihoods in the pilot areas. There are seasons when food is in short supply and family members lack resources to supply food for the family – indicating food insecurity.

The report of the JP's study on potential income generating activities makes a more specific assessment of poverty. According to the data that survey (of 1535 households in the pilot kebeles / PAs) "on monthly income estimation, about three-fourth of the respondents (72.52%) indicated that their monthly income was below $29 USD (i.e. about $0.9/ day). This could obviously lead to a conclusion that the overwhelming majority of the pastoral communities around the JP implementation villages are living far below the poverty line in view of universal life-standard assertion".

3.5 Quality of the Joint Programme's Monitoring and Evaluation Framework

Baseline

Contrary to best practice, a baseline survey for the programme was not completed at start-up.

The so-called baseline study was undertaken in August 2011, with questionnaires administered to 765 households (hh) sampled across the 4 programme regions, also 34 key informant interviews at hh level and 17 focus group discussions at community level. The results were published in December 2011, which was 26 months after the programme start. The MTE noted that the survey, although late, would be "very valuable for the programme" and "very useful for future impact monitoring and assessment". However, although the baseline provides valuable statistics (notably that 80% of pastoralists are "not food self sufficient" and 90% of household heads were illiterate), in retrospect, it appears that the time taken to train evaluators, administer and analyse the complex and wide ranging 5 page questionnaire per hh was a "snap-shot", with little or no reference to recent / the historical situation of rangelands which are (even prior to anthropogenic CC) notoriously changing (non equilibrium) environments. At the point it was designed, part way through the programme, efforts would have been better spent using more participatory methods, for example climate time-lines, seasonal analyses (typical conditions and emerging conditions), rain calendars, resource mapping etc. to ascertain the situation (current and past), key issues which the pastoralist in the four regions face and their understanding of increasing weather variability and particularly assessments of the conditions of the local rangelands.

The base line study (BLS) included asking the following questions within focus group discussions with pastoralists:

- E11 What do you Propose as Climate Change Adaptation/Mitigation and Communication Strategy/policy?
- E12 What are Climate Change risks/vulnerabilities of the Pastoral Communities at District level?
- E13 What copying mechanisms were/are being practiced both at community level and District level? Include traditional mitigation strategies/practices.

- E14 Do you think there are capacity gap at District level on how to plan (Strategic Plan) for and manage Climate Change adaptation and resource based conflicts?

The FE considers that these questions are not well suited to being understood by the JP beneficiaries, of whom it was already shown 90% are illiterate.

Furthermore, the whole set of questions in the BLS totally ignores traditional knowledge.

Time and effort should have been spent ascertaining the specific programme-related situation (i.e. not focusing on irrigation – which was not even a programme activity).

The BLS furthermore lacks clarity as results are tabulated in non-exclusive classes in BLS Tables (e.g. 13,29,36,37,38,44,46,47,48), making it impossible to fully understand the priority issues, for example Table 13: Shocks for the food insecurity experienced within the last 12 months and Table 36: Statuses of management of grazing land in the study districts.

It is useful that much of the data is presented disaggregated by woreda, as there are clear differences between the regions. However, concerning livestock holdings per household, these were combined for all 4 regions – seriously reducing their worth for final JP monitoring or post-programme follow-up.

Issues of gender equality and MDG indicators were not addressed in the 2011 baseline survey.

Many questions in the "baseline" study appear to be similar in content to that undertaken in the previous two months on Income Generating Activities, seriously questioning why JP funds were used for this.

MTE

The Mid-Term Evaluation was critical of the programme in several respects, including highlighting its slow rate of progress and the lack of indicators. Following the MTE, a major re-programming exercise was undertaken - and following that the internal programme monitoring of the physical progress of the joint programme was greatly improved. Consequently, it can be concluded that the MTE was absolutely crucial to the success of the JP.

Periodic M & E

The joint programme team mounted two extensive joint monitoring missions to the four JP regions in July / August 2012 – reports of which are comprehensive and demonstrate clearly the impact which the re-programme had on progress.

Comprehensive sets of data (in soft and hard copy) were complied showing accomplishments for each region and for EPA from start-up (July 2010) to December 2012. The Programme Coordinator has then compiled these into programme level accomplishments. These data have been relied upon in this analysis (see Annex 10).

Unfortunately, at the sites where range improvements have taken place (closures, bush clearing etc.) there is no evidence of systematic pre and post treatment monitoring of the range (e.g. soil organic matter, above ground biomass etc.)[22]. The only evaluation which could be undertaken in the Final Evaluation was a visual assessment of adjacent cleared and non-cleared areas. Similarly, there is no environmental impact assessment for the water points established under the JP.

Some information on gender can be deciphered at this Final Evaluation stage, from the accomplishment documents, notably on the gender break down of members of programme co-operatives and attending training courses.

[22] Reportedly the PC took a number of photographs at the sites

The short duration of the programme and the limited but highly dispersed geographical extent mean that the impact on national MDGs is small. A total of 376ha of rangeland have been enclosed and invasive bush cleared from 750ha (i.e. 3.76 and 7.5km^2). When viewed nationally, (Ethiopia extends over 1,104,000km^2), these totals are clearly negligible. However, locally, trends towards achieving MDG 7 (ensuring environmental sustainability) have improved with improved rangeland management, while poverty (MDG 1) should decline in the medium to long term due to the beneficial effects of the cooperatives and human health (MDG 4) will benefit from improved access to clean water.

3.6 Financial Progress of the Joint Programme

Table 5 shows how the JP funds (by UN agency) had been disbursed and utilized by each region to December 2012 (in birr). Overall, 73.72% of funds had been disbursed by that date, with Oromia the lowest (65.62%) and MoA the highest (79.30%).

Table 5: Summary Financial Report to 31 Dec 2012 (in birr)

		MoA	EPA	Afar	SNNP	Oromia	Somali	Total
UNDP	**disbursed**	5,514,141	188,740	4,508,300	1,903,235	2,704,154	8,339,295	23,157,865
	utilised	4,321,710	185,683	4,095,338	1,579,480	1,626,822	5,636,902	17,445,935
	remaining balance	1,192,431	3,057	412,963	323,754	1,077,332	2,702,393	5,711,929
	delivery rate (%)	78.38	98.38	90.84	82.99	60.16	67.59	75.33
FAO	**disbursed**	246,300	0	5,568,538	2,137,272	4,962,101	10,852,149	23,766,360
	utilised	246,300	0	3,713,063	1,470,630	3,404,053	8,611,050	17,445,096
	remaining balance	0	0	1,855,475	666,642	1,558,049	2,241,099	6,321,265
	delivery rate (%)	100.00	0.00	66.68	68.81	68.60	79.35	73.40
UNDP	**disbursed**	0	4,643,060	0	0	0	0	4,643,060
	utilised	0	3,124,739	0	0	0	0	3,124,739
	remaining balance	0	1,518,321	0	0	0	0	1,518,321
	delivery rate (%)	0	67.30	0	0	0	0	67.30
Total	**disbursed**	5,760,441	4,831,800	10,076,838	4,040,506	7,666,255	19,191,445	51,567,285
	utilised	4,568,010	3,310,423	7,808,400	3,050,110	5,030,875	14,247,953	38,015,770
	remaining balance	1,192,431	1,521,377	2,268,438	990,396	2,635,380	4,943,492	13,551,515
	delivery rate (%)	79.30	68.51	77.49	75.49	65.62	74.24	73.72
7% indirect costs for UNDP, FAO & UNEP not included								

The PCO have compiled a list of figures to 6 Feb 2013 in US$ (see Annex 11).

The implementing partners anticipate that they will disburse the majority of the outstanding amounts available before the date of joint programme closure (31 March 2013) as most of these have been committed to complete elements delayed prior to the MTE, also run lessons learned and dissemination workshops.

Any surplus funds should be directed to increasing awareness of climate change by radio, as this is shown to effectively reach large numbers of pastoralists and does not disadvantage those who are not literate.

Proportionately, the remaining amounts are a large amount to disburse in a short period – IPs at all levels were urged during the FE to ensure these monies were spent for the benefit of the pastoralists, as if they are not, they will have to be reimbursed to UN agencies and in turn to the Multi-Partner Trust Fund Office as per the Funds Closure Guidelines.

3.7 Assessment of the Multi-Stakeholder Approach

The programme involved three UN agencies (FAO, UNEP, UNDP) within the framework of UNDAF and the "Delivering as One" agenda. Each UN agency was largely responsible for the activities and outputs under a single Outcome, namely:

UNEP – Outcome 1: Climate change mitigation and adaptation options for pastoralists mainstreamed into national, sub-national and district development frameworks.

UNDP – Outcome 2: Enhanced capacity of government agencies and respective pastoralist community institutions to effectively respond to the climate change risks and challenges at all levels.

FAO – Outcome 3: Pastoral community coping mechanisms/sustainable livelihood enhanced.

These are the respective agencies' areas of comparative advantage in Ethiopia.

The overall high level of success of the programme in completing the majority of the planned activities demonstrates a great degree of success in the framework of UNDAF.

However, the MTE report and respondents during the Final Evaluation continue to highlight issues:

- The delayed start and slow progress in the early months of the JP placed undue pressures on those involved in the latter stages of the programme and, had the no-cost extension not been granted, would have meant that many more activities were not completed.
- There have been frequent delays from the date of a request to the release of funds from both UNDP and FAO, some involving the 80% rule – which have had knock-on effects, notably delaying seasonal activities (e.g. regarding the tree nurseries), high cost activities (e.g. water structures), also payments of Programme Officer salaries. Woreda-level and even Regional Finance Officers reported using woreda budgets for programme activities, while awaiting budget release from UNDP and / or FAO – which is clearly not ideal and was reported to have consequently delayed other woreda activities.
- Woreda Finance Officers complain that the procedures are highly bureaucratic involving GoE financial institutions – but this follows the UN's Implementation Manual for United Nations Agencies Assisted Programs in Ethiopia (PIM) (UN, 2011) and the Paris Declaration Indicator of Progress 5a (use of country public financial management systems). The MTE noted differences in speed to the release of funds between UNDP and FAO – this seems to have been resolved, although FAO remain reportedly "easier to work with".

No evidence was provided to the FE that the multi-agency approach had reduced transaction costs – indeed for the woredas, it has led to increased need for reporting, as these are required by each agency. However, with UNDP and FAO working together on the ground, the synergistic benefits are clear and deliver increased development results than if there were two separate programmes.

There were clearly undesirable communication issues between the 5 partners (see Section 3.2A).

4. Conclusions, Lessons and Recommendations

4.1 Conclusions of the Final Review

Relevance

1) It is very relevant that the Joint Programme is supporting the climate change agenda (particularly adaptation) at the policy and local levels in Ethiopia.
2) Ethiopia has faced challenges of rangeland management over many years, now exacerbated by climate change – which the inter-sectoral design of the JP is addressing more effectively.
3) The inter-sectoral design of the JP, with the three components addressing (1) policy; (2) awareness raising /capacity building / training; and (3) on-the ground activities was been highly commended as meeting the great need to link, for example, action to improve access to water in areas suffering from increasing frequency of droughts with training both on immediate concerns regarding on health and sanitation, plus awareness raising to help beneficiaries better understand and prepare for increasing weather variability.

Efficiency

4) After the delayed start, the JP has been well managed.
5) Overall there has been strong national ownership of the JP, which has contributed to its success in implementing most of the planned activities.
6) There has also been strong ownership at region / woreda and beneficiary levels.
7) There have been communication / knowledge sharing issues between the UN partners and also between the GoE partners which have reduced the overall effectiveness of the programme.

Effectiveness

8) Over the programme period, the JP has resolved many issues which arise working inter-sectorally and under the "One UN" approach, thus is now a fairly good example of the "Delivering as One" approach promoted by the MDG-F initiative.
9) The JP has contributed to the attainment of the majority of the short-term development outcomes.
10) There are clear links between the three JP Outcomes, which mean there have been synergies in the results.
11) The development of clean potable water points (wells, birkas, cisterns) in dryland areas brings immediate benefits for communities, however may exacerbate range degradation.
12) The "Climate Change Clearing House Mechanism" to exchange information on CC is not working and it is unclear that is will be sustainable.
13) It is highly likely that other elements of the JP will be sustainable and are replicable.
14) For effective monitoring and evaluation, all programmes and projects require a well designed baseline study to be completed at programme/ project start-up.

Cross-Cutting Issues

15) The JP managed to involve women in awareness raising / capacity building / training and will clearly be beneficiaries of the permanent water points but the FE was not shown evidence of the programme having run gender-specific activities.
16) The gender dimensions in policies seem to have been neglected.
17) Programmes should be designed to be inclusive with respect to staffing.

4.2 Lessons Learned from Joint Programme Implementation

1) The three UN agencies involved in this JP have different management procedures, but this experience of working together has enabled these agencies to harmonise and demonstrates that a level of cooperation and thus synergies can be achieved at country level.
2) The Mid-Term Evaluation was particularly influential in catalysing re-programming and efforts to ensure smooth implementation.
3) The design of the programme – with 3 Outcomes, each led by different UN agencies was designed to focus on each agency's area of comparative advantage, but arguably was not the most conducive to working together and information sharing.
4) Clearly agencies have different areas of technical and other expertise – these seem not always to have been used to best effect (notably FAO's technical expertise).
5) Working intersectorally is also new to agencies of the Government of Ethiopia – it will take time to achieve all the potential synergies.
6) It is vital that greater attention is given to gender dimensions, as without this policies aimed at mitigation and adaptation are likely to exacerbate the hardships of already disadvantaged women in pastoral communities of Ethiopia, who depend on natural resources for survival.
7) The challenging design of the JP, working in four distinct regions of Ethiopia (see Section 4.5) has uncovered interesting local differences (inter alia in the interests of pastoral groups, suitable income generating activities, propensity of women to become involved in cooperatives). In future, programmes should be more nuanced in their approaches – taking into account different traditions (more support is clearly needed in some areas for cooperatives) and particularly geographical factors such as distance from markets, transport links etc.
8) For effective monitoring and evaluation, all programmes and projects require a well designed baseline study to be completed at programme/ project start-up.
9) The design of monitoring systems should focus on areas where the programme is directly affecting (progress on activities) and also wider planned impacts (e.g. towards the MDGs), ideally using routinely collected disaggregated government statistics / other surveys. It should involve the programme beneficiaries in the impacts of on the ground activities such as changing range management practices [as is being pioneered by FAO's LADA (Local Approaches to Degradation Assessment)] and the environmental impacts of wells / birkas etc.

4.3 Actions to Follow-up or Reinforce the Initial Benefits from the Joint Programme

The Joint Programme document clearly stated that this is a pilot programme and will not even consider all the kebele / pastoral associations in the chosen woreda, or all the woreda in the 4 JP regions. Communities in kebele / PAs adjacent to the pilot JP sites in each woreda are reportedly very enthusiastic to learn from the programme interventions. The benefits of having set-up pilots should be garnered by ensuring that lessons learned are well publicized in local languages using various media (radio, poster, leaflet, teaching materials) in other pastoral areas – ideally including exchange visits.

The MoA now have much greater information and knowledge of the likely impacts of increasing weather variability and longer-term climate change on pastoral groups. It is important that they continue to disseminate this knowledge to help pastoralists appreciate human induced climate change and the options available to them to adapt their livestock-based livelihoods to increase their resilience (linking to advice in FAO (2010), also options to diversify into other income generating activities (ideally those not linked directly to livestock) – following the recommendations in the JP's Income Generating Activities report.

The EPA now has climate change adaptation plans for the JP regions and woreda, which they should disseminate and ensure that communities are better prepared for the likely increasing frequency of droughts and strong winds (and possible floods). Reviewing the EPA document on adaptation and mitigation, the options given are less directed at the pastoral communities, thus this should be more widely disseminated and translated into local languages. The JP's capacity needs assessments should be used immediately to guide capacity building at the different levels in the involved sectors.

JP's rangeland management interventions have all been implemented in the last 2 years (some only 2 months before the Final Evaluation), thus have had limited time to show benefits. However a number of sites, including the area of rangeland in Adaar woreda in Afar, which was cleared of Prosopis[23] and other invasive alien species (IASs), enclosed then over sown with a mix of improved grasses, show how rangeland has a high potential to recover, given such treatments. However, given the effort required (in manpower) to undertake such clearances and the massive extent of degraded rangelands in Ethiopia's drylands, it will only be feasible or indeed advisable for groups of pastoralists to clear small areas, for example close to camps, to create better grazing for improved livestock (e.g. for milking). The following opportunities should be considered by MoA to scale-up the JP's achievements in rangeland improvement, all of which could bring win-win-win benefits in terms of improved pasture, ecosystem services and climate change benefits (adaptation and mitigation):

- Re-introduction of controlled burning (see FAO, 2009a, which provides sound evidence that drylands are highly resilient and recover quickly from common disturbances such as fire[24]);
- Sustainable rangeland management / rotational grazing, (see FAO, 2009a, FAO 2009b and FAO, 2010c);
- Farmer managed natural regeneration (see IFPRI, 2010)- as an alternative to the tree nurseries which lacked success in the MDG-F;
- Use of Prosopis to provide food, animal fodder as well as its current seemingly only use - for fuel (see GO, 2012 and Annex 12).

4.4 Recommendations for Future Directions Underlining Main Objectives

1) The achievements of the JP should be publicized / disseminated at national and regional level to development partners, particularly those working with pastoralists.
2) Pastoralists living close to the rangeland sites restored under the JP are recognizing the benefits – and commendably already wish to extend them. This should be supported by GoE at woreda

[23] ***Prosopis*** is a genus of flowering plants in the pea family, ***Fabaceae***

[24] Fire can be used to improve the quality of the grass cover through stimulating new shoots, a short-term gain that also reduces woody cover. In general, pre rainy season spring fires enhance growth of certain grasses, and herbivores preferentially graze these grasses – keeping a system of checks and balances working properly and allowing many plant species to flourish.
The annual burning of tropical grasslands plays a significant role in the global carbon cycle. Large areas of savannah in the humid and subhumid tropics are burned every year for rangeland management, totaling some 700 million ha worldwide. This is especially severe in Africa where about 75 percent of grasslands are burned annually. Biomass burning in the savannahs destroys vast quantities of dry matter per year and contributes 42 percent of gross carbon dioxide to global emissions (This is three times more than the CO_2 released from burning rainforests.) However, savannah burning is not considered to result in net CO_2 emissions since equivalent amounts of CO_2 released in burning can be recaptured through photosynthesis and vegetation re-growth. In savannah systems that contain woody species, it has been shown that the carbon lost by fire can be replaced during the following season. However, in practice, grasslands that are burned too often may not recuperate, resulting in permanent loss of protective vegetation cover and productivity.

levels, including with help in future management of these areas to sustain the range improvements.

3) Grazing controls should be developed around the JP water points, to reduce the risk of overgrazing.
4) Wide scale rangeland improvement programmes are vital to sustain pastoral populations. It is unlikely that funds will be available to pay communities for bush clearing etc. (as was possible under the JP). Awareness raising of the benefits and options for lower cost range improvement (see Section 4.3) – including exchange visits to JP beneficiary communities, as these are vital to halt the vicious cycle of degradation (and contribute to Ethiopia's NAP and EPACC targets).
5) A more nuanced approach is needed for programmes working with pastoral groups, as clearly there are differences in interests, opportunities, suitability of IGAs etc. between pastoral areas of Ethiopia.
6) The concept and operation of cooperatives is very new to pastoralists and unlike anything they have an understanding of. The new cooperatives developed under the JP will require continued support from GoE to become effective income generating activities, also to repay their start-up funding (which is to be recirculated to other new groups in the same areas).
7) Communities should be encouraged to include activities in their cooperatives which do not involve livestock – as this will increase their adaptive capacity.
8) Future "Delivering as One" programmes need to be designed and implemented in such a way as to ensure that each involved agency can contribute their full range of expertise.
9) The UN agencies need to ensure that their individual bureaucratic processes do not deleteriously affect implementing partners.

4.5 Best Practices and Problems in Addressing Issues Relating to Relevance, Performance and Success

Best Practices

Choice of Pilot Areas

Many programmes and projects, particularly those of short duration and "pilots", choose to target sites for "quick wins", where there are likely to be considerable and clear impacts on the ground within the project / programme's lifespan. The designers of the MDG-F Environment Joint Programme and the Government at Federal and decentralized levels resisted this temptation and instead genuinely focused activities of this JP on the kebeles / pastoral associations which were most in need of support (based on the following criteria: the extent of vulnerability to climate change, ecological fragility, human and livestock population and level of poverty among pastoral communities).

There have been considerable implications / challenges to working in the most vulnerable kebele / PAs. Geographically, they are some of the most remote (see map in Annex 5), not only from Addis Ababa, but also from the region centres, for example Selamago and the PAs in SNNP are ca. 12 hours drive from Awassa, where that region's Focal Person was based. For Oromia, the FP was based in Addis Ababa, 2 days travel from Teltele wodera. The Joint Programme Officers for each woreda are based in their respective woreda centre – and again, this raised challenges over distance in every region (see below regarding transport for Joint Programme Officers).

The remote JP locations created other transport and logistical problems, including for:

- beneficiaries attending training courses;
- transporting materials and equipment to sites (e.g. equipment for well drilling in SNNP);

- accessing markets for livestock to be sold by livestock marketing / fattening co-operatives (e.g. Solamago pastoralist group, based over 100km by dirt road from Jinka, itself is a remote small town in SNNP).

The JP could more easily have focused on a single administrative region of the country, to focus on-the-ground investments and have greater local impact. Instead, the JP worked in the four main pastoral regions, thus actual impacts on the ground after the short time-period of implementation in each are quite limited. However, some of the differing outcomes from quite similar interventions demonstrate that there are clear differences between groups of pastoralists and their wider environmental situations (*inter alia* geographical, socio-economic and cultural differences).

Most notably, the Somali region stands out as an area in which strong, apparently already quite business-minded women dominate the JP livestock marketing co-operatives (e.g. Hafulfe [26 members, only 6 men] – and Mustajabo), focusing on fattening groups (ca. 10-12) goats / sheep – and in the latter case now camels, having identified a good market for sale of their local breeds at Jijiga for export via Hargeysa and Berbera to a market in Saudi Arabia for the annual Hajj. The women stated that the experience of setting-up a cooperative had "opened their eyes" and there had been a knock-on effect across the woreda, with people generally becoming more business oriented. In contrast, the livestock marketing cooperative in Solamago woreda (SNNP) which is currently dominated by men (77 members, of which only 3 are women) have only spent a small amount of their cooperative's loan on two cattle (ca. 4,000 birr each), which they hope to sell once market prices rise (expecting a profit of ca. 1,000 birr per head after 4 months). The latter demonstrates the understandably much more conservative approach by a group of traditional pastoralists for whom marketing livestock as a group is a completely new concept, and for whom the challenges are enormous, due to their very remote location. It must be concluded that it will take much longer for such groups to generate income – but their interest and commitment is such that, as has been promised by the woreda administration, their co-operative will continue to receive support post-programme.

There are also environmental differences between the regions, with shallow wells being dug by the joint programme in Selamago woreda of SNNP, also Ayisha woreda in Somali, but only birkas (collecting surface run-off) in neighbouring Harshin woreda, where ground water levels are very deep (reportedly >200m).

Alternative Approaches to Rangeland Management

Fire is reportedly not know in Somali region – whereas in SNNP, evidence was noted of recent use of fires to manage the rangelands en route from Jinka to Hana (Selamago centre) and local officials stated their plans to increase awareness of the value of using fire to restore degraded rangelands (particularly to up-scale eradication of encroaching bush), once awareness of the importance of fire-breaks had been raised. The JP includes very labour intensive methods of rangeland management, which are only feasible for example close to pastoralists' home camps. Careful use of fire, or rotational grazing management (following awareness raising / training) could enable much wider areas of degraded rangeland to be improved, restoring these fragile ecosystems and their functioning.

Other Issues and Problems

Programme Time Scale and Slow Start-up

Projects tend to be relatively short-term (3-5 years), Programmes are usually longer-term, especially those linked to environmental activities on the ground, which take time to show benefits. The short length of this programme means that the benefits on the ground are not yet clear, especially as the JP start-up was delayed by 9 months.

In common with that of many other MDG-F JPs, the design of this JP clearly underestimated the not inconsiderable time and effort which would be required to set-up the strong coordination required for an intersectoral programme and begin implementation.

Fund Transfer

The time taken for the request for fund transfer from the initial request, via the woreda pastoral bureau, Regional BoFED and the PCO to the UN agencies then their transfer of birr via Regional BoFED to the implementing agency remains a concern. It was criticized in the Mid-Term Evaluation (MTE), after which the situation reportedly improved, but continued to be mentioned in every meeting at region and woreda level during the Final Evaluation – and it is reported had serious implications for JP activities. Notably, reported delays at the many stages in the transfer of funds[25] had an impact of activities which were dependent on season (e.g. establishment of tree nurseries) also for PO salaries. Several of the woredas stated that they had attempted to reduce the impacts of the delays in receiving funds by using woreda funds, and then transferring JP funds once received back to the woreda. However, this reportedly had a knock-on effect, delaying other woreda activities / commitments. Each woreda felt that the JP was highly important in their overall activities, in some cases the only effort to support their activities on climate change and that the problem in transfer of funds had led to a big workload at the end of the JP, also some loss of trust.

The MTE noted differences in the efficiency of fund transfer between UNDP and FAO – this appeared to have been resolved after the MTE and was rarely mentioned in the Final Evaluation – although the informants noted that there are differences in procedures between UN agencies, which they found problematic. Ideally, for a UNDAF programme, it would be beneficial to have a single set of procedures.

[25] Request from IP at woreda level -> Regional BoFED -> PCO (for verification) -> responsible UN agency **then** birr transferred from UN agency ->Regional BoFED -> IP at woreda level

Annexes

Annex 1: Terms of Reference for Final Evaluation

Overall Goal of Evaluation

The nature of this final evaluation is summative and has the following general goals:

1. Measure to what extent the environment joint programme has fully implemented its activities, delivered outputs and attained outcomes, specifically measuring development results.
2. Generate substantive evidence based knowledge, by identifying best practices and lessons learned that could be useful to other development interventions at national (scale up) and international level (replicability).

As a result, the findings, conclusions and recommendations generated by these evaluations will be part of the thematic window Meta evaluation, which the Secretariat is undertaking to synthesize the overall impact of the Fund at national and international level.

Methodological Approach

This final evaluation will use methodologies and techniques as determined by the specific needs for information, the questions provided to the evaluation team and the availability of resources and the priorities of stakeholders. In all cases, consultants are expected to analyze all relevant information sources, such as reports, programme documents, internal review reports, programme files, strategic country development documents, the mid-term evaluation and any other documents that may provide evidence on which to form judgments. Consultants are also expected to use interviews, surveys or any other relevant quantitative and/or qualitative tool as a means to collect relevant data for the final evaluation. The evaluation team will make sure that the voices, opinions and information of targeted citizens/participants of the joint programme are taken into account.

The methodology and techniques to be used in the evaluation should be described in detail in the desk study report and the final evaluation report, and should contain, at minimum, information on the instruments used for data collection and analysis, whether these be documents, interviews, field visits, questionnaires or participatory techniques.

Evaluation Deliverables

The consultant is responsible for submitting the following deliverables to the evaluation reference group:

- ✓ **Inception Report** (to be submitted within 10 days of the submission of all programme documentation to the evaluation team).

  This report will be 10 to 15 pages in length and will propose the methods, sources and procedures to be used for data collection. It will also include a proposed timeline of activities and submission of deliverables. The desk study report will propose initial lines of inquiry about the joint programme. This report will be used as an initial point of agreement and understanding between the consultant and the evaluation managers. **The report will follow an outline which will be provided in due time. More details on the evaluation report will also be provided.**

- ✓ **Draft Final Report** (to be submitted within 15 days after the completion of the field visit, please send also to MDG-F Secretariat).

  The draft final report will contain the same sections as the final report (described in the next paragraph) and will be 20 to 30 pages in length. This report will be shared among the evaluation

reference group. It will also contain an executive report of no more than 2 pages that includes a brief description of the joint programme, its context and current situation, the purpose of the evaluation, its methodology and its main findings, conclusions and recommendations. The draft final report will be shared with the evaluation reference group to seek their comments and suggestions. This report will contain the same sections as the final report, described below.

- ✓ **Final Evaluation Report** (to be submitted within 7 days after reception of the draft final report with comments, please send also to MDG-F Secretariat)

  The final report will be 20 to 30 pages in length. It will also contain an executive summary of no more than 2 pages that includes a brief description of the joint programme, its context and current situation, the purpose of the evaluation, its methodology and its major findings, conclusions and recommendations. The final report will be sent to the evaluation reference group.

Annex 2: List of Documents Reviewed

Programme Documents

MDG-F Final Programme Document [23/12/11]

Programme Final M&E Framework

Baseline Documents

Baseline Study in programme Woredas of Afar, Somali, Oromia and SNNP Regions of Ethiopia [Dec 2011]

Training Workshop for Expertise on Baseline Survey/Study (Basic issues, data collection Tools and Work plan) [August 2011]

Annual Reports

Second Consolidated Annual Progress Report on Activities Implemented under the MDG Achievement Fund (MDG-F) (1 Jan to 31 Dec 2009) [June 2010]

Third Consolidated Annual Progress Report on Activities Implemented under the Millennium Development Goal Achievement Fund (1 Jan to 31 Dec 2010) [May 2011]

Annual Workplans

[July 2009-10 Annual Workplan in Programme doc]

Annual Work Plan Period: 2004 Eth Fiscal Year (July 2011 - June 2012)

PMC Meeting Minutes

Minutes of MDG – F Program Management Committee (PMC) 2nd Meeting – 02/2010 [24 May 2010]

Minutes of MDG – F 3rd Program Management Committee (PMC) Meeting – 03/2010 [July 26 2010]

Minutes of 6th Spanish MDG-F Environment Joint Program PMC Meeting o6/2011 [July 14 2011]

Minutes of MDG – F Environment Joint Program 7th PMC Meeting – 07/2011 [22 Dec 2011]

Minutes of MDG – F Joint Program 8th PMC & ERG Joint Meeting – 08/2012 [3 March 2012]

Minutes of MDG – F Joint Program 9th PMC Meeting – 09/2012 [3 April 2012]

Minutes of MDG – F Joint Program 10th PMC Meeting – 10/2012 [11 April 2012]

Minutes of MDG – F Joint Program 11th PMC Meeting – 11/2012 [16 August 2012]

Quarterly Reports

Progress Report for the 1st Quarter of 2004 EFY (Jul -Sept 2011) [27 October 2011]

Progress Report for the 2nd Quarter (Oct, 2011-Dec, 2011) of 2004 EC [Dec 2011]

Semi Annual Program Narrative Progress Report (July-December 2010) [Jan 2011]

Quarter 3 Program Narrative Progress Report (January- March 2011) [April 2011]

4th Quarter Program Narrative Progress Report (April-June 2003EFY) [July 2011]

Progress Report for the 3rd Quarter (Jan -March, 2012) of 2004 Eth. C [1 April 2012]

Fourth Quarter Progress Report, 2004EFY (April -- June 2012) [July 2012]

Narrative Report of 1st Quarter 2005 E.C. [July - Sept 2012]

Narrative Report for Quarter 2 (2005 EFY) [January 2013]

Semester Reports

Environment Joint Programme Semester 2 (2009) Report

Environment Joint Programme Semester 2 (2010) Report

Environment Joint Programme Semester 1 (2010) Report

Environment Joint Programme Semester 1 (2011) Report

Environment Joint Programme Semester 2 (2011) Monitoring Report

Environment Joint Programme Semester 1 (2012) Report

Field Mission Reports

Report on Joint Monitoring Mission of MDG –F Environment Joint Program Somali Region, March 21-29/11 [31 March 2011]

MDG-F Ethiopia Mission Report April 30-May 5, 2012 (Final Draft and Final Draft 2)

Report on Joint Field Monitoring Mission to Afar and SNNP Regions on MDG-F Environment Joint Programme (July 16-30) – final version [August 2012]

Back to Office Report on Joint UN Agencies and Federal Implementing Partners Field Monitoring and Technical Backstopping Mission to Somali and Oromia Regions on MDG–F Environment Joint Program – final version [August 2012]

Mid-Term Evaluation

Mid Term Evaluation – ToRs

Mid-Term Evaluation [12 March 2012]

Mid-Term Evaluation – Annexes [12 March 2012]

Mid Term Evaluation - Inception Report [12 Jan 2012]

Position and response of GOE to the MTE recommendations and direction to implement the programme [undated]

Programme Improvement / Reprogramming

Final Programme Improvement Plan [6 April 2012]

Reprogrammed Work Plan (April, 2012 – March, 2013) [?]

Reprogrammed Budget Summary [?]

Environment Joint Programme Review Workshop 20-22 [April 2012]

Final Updated Exit Strategy [6 April 2012]

Programme Results Framework with Financial Information

Final Joint Programme Results Framework with financial information [20 June 2012]

Accomplishments (2010-2012)

Afar Region

Somali Region

SNNP Region

Oromia Region

EPA

Workshop Reports

Minute of the workshop (July 1 -2 2010): Joint environment Programme

Mesfin Presentation for Review Workshop [31/12/2012]

Report on MDG Environment Joint Programme Training of Trainers (TOT) Workshop [Jan 2012]

Income Generating Activities

A Participatory Assessment of Viable Potential Income Generating Activities in Six Pastoral [2011]

A Proposal on Participatory Assessment of Viable Potential Income Generating Activities in Six Pastoral Woredas [14 Feb 2011]

Communication and Advocacy

Report on MDG-F Environment Joint Programme Communication and Advocacy Activities in Partnership with Higher Education Institutions [Dec 2012]

An Integrated Communication and Advocacy Strategy for Enabling Pastoral Communities to Adapt to Climate Change and Restoring Rangeland Environments Programme [April 2012]

Climate Change Adaptation Plans

Ministry of Water, Energy and Climate Change

Ministry of Agriculture

Regions (Afar, Somali, Oromia)

Woreda (Aisha, Harshin, Teletele)

Success Stories

MDG-F Success Stories

- Pastoralists Weather Climate Change with UN Program Assistance
- Pastoralists' Livelihood Changes with the Support of MDG-F Environment Joint Program

Visuals

A-Visual Illustration on MDG-F Environment JP Interventions [July 2010 – 20/12/12]

B-Visual Illustration on MDG-F Environment JP Interventions [19 Dec 2012]

ToRs

ToR for Training on Community Participatory Planning on MDG-F Environment Joint Programme [Nov 2011]

ToRs for UN Agencies and Federal Implementing Partners Joint Monitoring and Technical Backstopping Mission to Afar and Somali Regions [Dec 2011]

Guidance Documents

Implementation Guidelines for MDG Achievement Fund Joint Programmes [last up-dated Feb 2011]

MDG-F Monitoring and Evaluation System "Learning to Improve" (Making evidence work for Development) [undated]

MDG-F Technical Brief - Module 11: Monitoring and Evaluation (M&E) [undated]

Guideline to Implement MDG_F Environment Joint Programme Phasing-Out Strategy [August 2012]

Frequently Asked Questions (FAQ) MDG-F Joint Programme Final Evaluations [8 August 2012]

Writing the Evaluation Report: General Tips [8 August 2012]

Closing of MDG-F Joint Programmes (Guidance) [1 Nov 2011]

Paris Declaration

Paris Declaration Indicators of Progress -To be measured nationally and monitored internationally [06/07/11]

Survey on Monitoring the Paris Declaration Fourth High Level Forum on Aid Effectiveness [2011]

Other Miscellaneous Programme documents

Minutes High Level Steering Committee Meeting [22 February 2012]

Final Draft Jan- June 2011 Environment JP Monitoring Report [June 2011]

Management Response template (submitted on Dec. 11, 2012)

MDG-F Minutes of the Joint Programmes Review Meeting 20 April 2011

MDG-F Secretariat Meeting Summary [?]

Summary notes National Review Meeting Enhanced Coherence on Joint programming and implementation 1-2 July 2010, Nazareth

Minutes of 4th Spanish MDG – F Environment Joint Program PMC Meeting 2010 [2 December 2010]

Sara Ferrera Report [undated]

Spain MDG Achievement Fund National Steering Committee Meeting [7 June 2011]

MDG-F Secretariat Meeting Summary [?]

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Annex 3: List of People Met in Formal Meetings

Date	Person Met	Role	Organisation
11/01/13	**Briefing of the consultant / discussion on the draft Inception Report**		
	Claire E. Balbo	MDG-F Programme Analyst	UNDP
	Wondwosen Michago	National Consultant	MDG-F Terminal Evaluation
	Mesfin Berhanu	Programme Co-ordinator	MoA
	Ines Mazarrasa	Co-ordination Officer (Special Assistant to the RC)	Ethiopia Delivering as one
	Netsanet Deneke	Programme Officer	UNEP
	Gijs van't Klooster	Livestock Team Leader	FAO
	Demeke Feyera	Assistant Prog. Co-ordinator	EPA
	Tsegaye Woldegiorgis	Training / Cap Building Officer	MDG-F Joint Programme
14/01/13	**Discussion with Somali Region Programme Management Committee**		
	Ahmed Mohammed	Field Co-ordinator	FAO
	Dr Abdulkadir	Bureau Head	LCRDB
	Abdulkadu M. Faneh	Deputy Head	LCRDB
	Abdurahman Mohamoud	Finance Officer	BoFED
	Hussein Abdulalu	UN-ExCom Prog Co-ord.	BoFED
	Bashir Sh Aden	NCSO Co-ordinator	RHB
	Ali Mohamed Hassan	Water Resource Study+Man Owner	Water RB
	Abdirahman Ahmed	M & E Officer, MDG-F JP	LCRDB
	Muktar Abdi Ali	MDG-F Focal Person	LCRDB
15/01/13	**Discussion with Harshin Woreda (Somali Region) Programme Implementation Team**		
	Aade Abde Iahi	Chariman	Harshin Woreda
	Mohammed Jama	MDG-F Programme Officer	MDG-F
	Muktar Ahmed		LCRDB
	Mohammed Waber	Finance Officer	LCRDB
	Fund Seid		
18/01/13	**Discussion with SNNP Region Programme Technical Committee**		
	Alemnesh Lemma	MDG-F Focal Point	BPA
	Andinet Wlmeskwl	Watershed Expert	Regional Water Resources Bureau
	Seyoum Getanch	Development Planning Officer	BoFED
	W Herhan Kuma	Case Team Co-ordinator	NREPA
20/01/13	**Discussion with Teltele Woreda (Oromia Region) Programme Management Team**		
	Guyo Bule	Head	Pastoral Development Office

	Mohammed Shako	MDG-F Programme Officer (Teltele Woreda)	
	Atlaw Belayneh	Field Co-ordinator	FAO
	Simvet Yemane		Federal EPA
	Ayele Nyussie		Teltele Co-operative Office
	Bunti Hosi		Teltele Education Office
	Sultan Burka		Water Office
	Guyo Nuva		Rural Land & Environment National Education Head Office
	Tilahun Amaree	Vice Head	Pastoral Development Office
	Kassaya Budasson	Head of Economic Development	
	Meselch Dheenge		Women's Affairs
23/01/13	**Discussion with Solamago Woreda (SNNP Region) Programme Management Team**		
	Banana Tebelgu	Head Administrator	Solamago Woreda
	David Etefa	PDO Deputy Head	
	Glselassie	Programme Officer	MDG-F Environment Joint Programme
	Genta Debena	NR Co-ordinator	
	Seifu Ayele	Head of WoFED	
	Tairku Dorie	Head of Water	
	Tadesse Mekonnen	Co-op Marketing Office	
28/01/13	**Discussion with Afar Region Programme Technical Committee**		
	Darasa Ali Mahamed	Vice Head	
	Mohammed Seid	MDG-F Regional Focal Person	
	Abew Getnet	Owner of Study, Planning and Budgeting Support Process	
	Aragie Tiku	Animal Health Expert	
	Teha Kedir	Agric Inputs & Marketing	
	Mohammed Muhamud	Natural Resource C Process	
	Ahmed Hussein	Hydro geologist	
29/01/13	**Discussion with Addar woreda Programme Officer and Implementation Team**		
	Ali Delea	Woreda Administrator	
	Kedir Nuru	Pastoral Officer	
	Medina Oumer	WE Official	
	Tioabil Famzo	MDG-F ?	
	Tarekegn Daremo	Water Resources Expert	
	Tawodrol Sebehat	MDG-F Programme Officer	
	?	Education Official	
31/01/13	**Meeting with Spanish Cooperation**		
	José Antonio Nsang	Deputy Head, Development Coopertaion	AECID
	Claire E. Balbo	MDG-F Programme Analyst	UNDP
	Ines Mazarrasa	Co-ordination Officer (Special Assistant to the RC)	Ethiopia Delivering as one

31/01/13	**Meeting at EPA**		
	Berhanu Solomon	Programme Coordinator	EPA
	Habfamn Wodajo	Finance Director	EPA
	Demeke Feyera	Assistant Prog. Co-ordinator	EPA
01/02/13	**Meeting with UNDP Climate Change and Vulnerabilities Team**		
	Sinkinesh Beyene	Team Leader	UNDP (CCV Team)
	Takele	Programme Officer	UNDP (CCV Team)
	Claire E. Balbo	MDG-F Programme Analyst	UNDP
01/02/13	**Meeting with ERG**		
	Claire E. Balbo	MDG-F Programme Analyst	UNDP
	Ines Mazarrasa	Co-ordination Officer (Special Assistant to the RC)	Ethiopia Delivering as one
	Mesfin Berhanu	Programme Coordinator	MoA
	Netsanet Deneke	Programme Coordinator	UNEP
	Hassan Ali	Programme Officer	FAO
	Workicho Jateno	Programme Officer	FAO
01/02/13	**Meeting with FAO**		
	Hassan Ali		FAO
	Workicho Jateno	Programme Officer	FAO
	Gijs van't Klooster	Livestock Team Leader	FAO
	Claire E. Balbo	MDG-F Programme Analyst	UNDP

People contacted by Email or Telephone

Person Contacted	**Role**	**Organisation**
Sara Ferrer Olivella	Programme Advisor	MDG-F Secretariat
Sileshi Getahun	State Minister for Agriculture	MoA
Admasu Nebebe	Director UN Agencies and Regional Economic Cooperation Directorate	MoFED

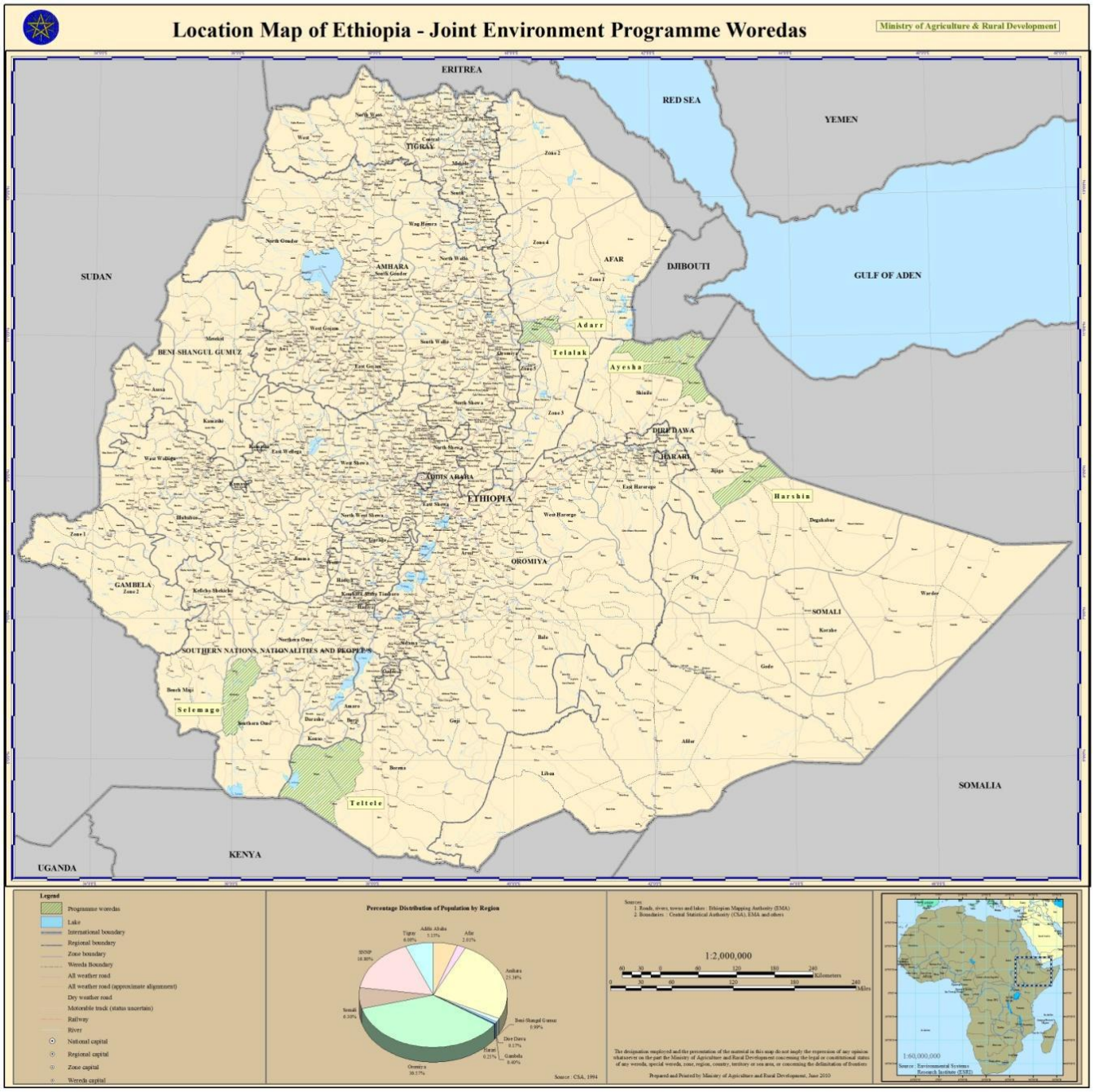
Annex 4: Final Evaluation Itinerary

Date	Region	Woreda	Activity
10/01/13			Depart UK
11/01/13			Arrive Addis Ababa
			Briefing and review of draft Inception Report
			Administrative tasks
12/01/13			Continue preparations for evaluation
13/01/13			Continue preparations for evaluation
14/01/14			IC and Nat Consultant fly to Jijiga (with UNDP PO)
14/01/13	Somali		Discussion with Somali Region Programme Management Team/Committee
			Discussion with Region Focal Person
15/01/13			Travel by car to Harshin
		Harshin	Discussion with Wereda Programme Implementation Team Harshin wereda
			Visit Hafufley programme site (PA) and discuss with programme beneficiaries – livestock marketing co-operative + rehabilitated animal health clinic
16/01/13			Visit Medewin programme site (PA) and discuss with programme beneficiaries – livestock marketing co-operative + rangeland closure site + birka
			Visit Farahliben programme site (PA) and discuss with programme beneficiaries - birka
			Return to Jijiga
17/01/13			De-briefing with LCRDB Head
			Final meeting with MDG-F Focal Point and M & E Officer
			Fly to Addis
18/01/13	SNNP		Drive to Hawassa / exchange vehicles
			Discussion with SNNP Region Focal Point and Programme Management Team National Consultant departs field mission UNEP and EPA representatives join mission
19/01/13			Travel to Yabelo
20/01/13	Oromia		Travel to Teltele Wereda
		Teltele Woreda	Discuss with Teltele Wereda Programme Management Team
			Visit Saba PA sites and meet beneficiaries – rehabilitated pond, bush clearing / enclosure, rwh cistern, livestock market post, rehabilitation animal health clinic
			Travel to Yabelo
21/01/13			Travel to Teltele Wereda
			Continue to visit Saba PA sites and meet beneficiaries – LMC

Date	Region	Woreda	Activity
			Visit Saritie PA sites and meet beneficiaries – re-habilitated pond, LMC, village benefiting from planting tree seedlings (un-funded co-operatives ready to receive loans, but funds not released) and woreda tree nursery
			Travel to Konso
22/01/13			Travel to Jinka
			Working on results of field visits
23/01/13	SNNP	Solamago	Travel to Hana
			Discussions with Solamago Woreda Programme Management team
			Visit Omo Rombe sites and discuss with program beneficiaries – medium pond, shallow well, Omohana Kebele (Aybuja Village) livestock crush, milk and milk products co-operative
			Visit Giyo (now Omo Hana) sites and discuss with program beneficiaries – shallow well, range clearance site, LMC
			Travel to Jinka
24/01/13			Travel to Awassa
25/01/13			Rest / analysis day[27] UNEP and EPA representatives leave mission
26/01/13			Travel to Awash (exchange vehicles in Mojo)
27/01/13	Afar		Travel to Semera
28/01/13			Discussion with Afar Region Programme Management Team/Committee
			Discussions with Regional Focal Person
29/01/13			Travel to Adaar Woreda
			Discussions with woreda Programme Officer and Implementation Team
			Possible field visits
			Travel to Dessie
30/01/13			Travel to Addis Ababa
31/01/13			Meetings with Spanish Cooperation and EPA (Minister of Sate for Agriculture unable to meet as scheduled)
01/02/13			Meetings with UNDP CCV Team Leader, ERG de-briefing then with FAO
02/02/13			Return to UK

[27] SNNP field visits all completed on 23/01/13, thus day spent in Awassa

Annex 5: Map of Programme Intervention Areas



(Joint Programme woreda coloured in green)

Annex 6: Programme of Adaptation to Climate Change (EPACC)

Goal: To contribute to the elimination of poverty and to lay the foundation for a climate resilient path towards sustainable development[28]

1. Involve the whole population in planning and implementation of adaptation to climate change.
2. Forecast climate change through country-level and sub-country level climate change modelling.
3. Identify and prevent worsening and emerging human diseases.
4. Identify and prevent worsening and emerging animal diseases.
5. Identify and prevent worsening and emerging crop and wild land plant diseases and pests.
6. Prevent land degradation and thus reduce soil loss to its natural equilibrium rate of equalling the rate of soil formation from bedrock.
7. Reduce biodiversity loss to achieve equilibrium with the natural rate of diversification.
8. Prevent biomass and soil nutrient accumulation in urban areas as waste by taking the waste back to farmlands as fertilizer.
9. Counter the agricultural productivity reduction that emanates from climate change through effective research and development.
10. Manage water effectively to make it always available to humans, animals and crops
11. Reduce the impacts of severe droughts by cloud seeding to induce rain.
12. Establish building & construction codes that ensure structures withstand extreme weather events.
13. Store food and feed in good years for use in bad years.
14. Ensure that transportation access to disaster prone areas is always available.
15. Develop an insurance scheme for compensation from damage from bad weather.
16. Organize and train local communities for quick response to extreme weather events.
17. Resettle people from disaster prone areas before disasters materialize.
18. Shift homesteads to using renewable resources of energy.
19. Shift from fossil fuel to renewable energy for running engines for transportation and other purposes.
20. Ensure that gender equity is achieved.
21. Ensure that the physically handicapped are enabled to fend for themselves.
22. Prepare to receive and cater for environmental refugees driven away by climate change.
23. Map and delineate areas likely to suffer from climate change and extreme weather events.
24. Develop an accessible information network on climate change.
25. Develop an early warning system to alert people of impending extreme weather events.
26. Mainstream awareness on climate change into development and service activities.
27. Mainstream adaptation to climate change into education curricula.
28. Ensure that research and development efforts in all sectors focus on adaptation to climate change.
29. Establish an effective monitoring and evaluation system for the Implementation of the Programme of Adaptation to Climate Change.

[28] Those highlighted are included in the JP

Annex 7: Attendance at JP Capacity Building Courses

No.	Seminar/Workshop/Training/Study Tour/Field Visit Title	Duration (Days)	Participants		
			Female	Male	Total
1	Community training on climate change adaptation, planning and conflict management.	**5**	**50**	**194**	**244**
2	Awareness creation workshop on better utilization of rangeland resource for community members.	**5**	**83**	**241**	**324**
3	Training for community leaders on management of community development fund	**6**	**117**	**106**	**223**
4	Training both for women and men pastoral community members on business development skill	**5**	47	136	183
5	Training on water harvesting facility construction, maintenance and management for water committee (for water committees)	4	11	32	43
6	Training for school teachers on climate change adaptation planning ,implementation ,monitoring & evaluation , Community based Early warning system , natural resource based conflict based resolution & Gender & HIV mainstreaming	5	11	47	58
7	Training on environment protection and water scheme management	**4**	11	32	43
8	Training for hygiene committees in the target woreda(for committee members	**4**	45	116	**161**
9	Training on seedling plantation technique and management for model pastoralists	**2**	20	119	139
10	Training for Cooperative board members on cooperative principles, book keeping, business planning etc)	**4**	66	231	297
11	Refresher training to vet staff (woreda staff and 5 regional staff) in collaboration with 12FAO, MoA and PCO	**5**	**5**	**37**	**42**
12	Training for Woreda experts (expert per woreda) by trained regional experts (for weeks	14	20	137	157
13	Training for woreda experts and extension agents	10	29	121	150
14	Study tour to Strengthen local CC pastoral coordination mechanisms	8	2	29	31
15	Experience sharing for pastoralists and experts within the region (region, community representative & woreda experts)	5	4	40	44
16	Cross visits for community members and regional and woreda experts in consultation with FAO, MOA and PCO	7	10	42	52
17	Train staff on GIS application for CC and adaptation	10	20	20	40
18	Vocational skill training both for women and men members of the community on identified viable schemes.	12	10	65	75

Annex 8: Pond developed under the JP and community's new pond in Sarite Woreda, Oromia

Pond constructed under the JP

photo copyright Anne C Woodfine

New pond being constructed by the local community (without JP supporting funds)

photo copyright Anne C Woodfine

Annex 9: Joint Programme Personnel

Name	Role	Period	Agency	Region	Woreda	Remark
Mr. Mesfin Brehanu	Programme Coordinator	July 2010 – pres.	PCO			JP Employee
Mr. Tsegaye W/Giorgis	Training Officer	Dec. 2011 – Pres.	PCO			JP Employee
Mr. Habtu Bezabih	Director	July 2010 – Present	MoA			
Mr. Mehammed Ali	Focal Person	Sept. 2010 – Dec. 2010	EPA			
Mr. Berhanu Solomon	Focal Person	Jan. 2011 – Pres.	EPA			
Mr. Demeke Feyera	Assistant Focal Person	August 2011 – Pres.	EPA			
Ms. Ines Mazarrasa	RC Officer	July 2010 – Present	RCO			
Ms. Claire Balbo	Programme Officer	March 2012 – present	UNDP			
Mr. Dereje Dejene	Team Leader	Oct. 2009 – Aug. 2010	UNDP			
Mr. Shimelis Fekadu	Team Leader	August 2010 - June 2012	UNDP			
Mrs. Sinkinesh Beyene	Team Leader	Ju8ly 2012– Pres.	UNDP			
Mr. Takele Teshome	Programme Officer	August 2010 - March 2012	UNDP			
Mr. Getachew Felleke	Focal Person	July 2010 – Dec. 2012	FAO			
Mr. Hassan Ali		July 2010 – Present	FAO			
Mr. Gijs Van't Klooster	Focal Person	Dec. 2012– Present	FAO			
Mr. Workicho Jateno	Programme Officer	July 2010 – Present	FAO			
Mr. Netsanet Deneke	Programme Officer	? 2010 – Present	UNEP			
Mr. Abdi Beshir Ahemed	Region Focal Person	May 2010 – Oct. 2010	LCRBD	Somali		
Mr. Ahemmed Seid	Region Focal Person	Nov. 2010 – Nov. 2012	LCRBD	Somali		
Mr. Muktar Abdi Ali	Region Focal Person	Dec. 2012 - present	LCRBD	Somali		
Mr. Abdirahman Ahmed	Programme M & E Officer	Dec. 2012 – present	LCRDB	Somali		
Mr. Mohammed Jama	Programme Officer	Nov. 2010 - present	MDG-F	Somali	Harshin	JP Employee
Mr. Abduroheman Redewan	Programme Officer	Nov. 2010 - present	MDG-F	Somali	Ayisha	JP Employee
Mr. Getachew Abebe	Region Focal Person	June 2010 – August 2010	BPA	SNNP		
Mrs. Alemenesh Lema	Region Focal Person	Sept. 2010 - present	BPA	SNNP		
Mr Addisu Kumtu	Programme Officer	Dec. 2010 – April 2011	MDG-F	SNNP	Solamago	JP Employee
Mr Glselassie Desta	Programme Officer	June 2011 - present	MDG-F	SNNP	Solamago	JP Employee
Mr Humenessa G/Silassie	Region Focal Person	May 2010 – Pres.	PAC	Oromia		
Mr Mohammed Shako	Programme Officer	Dec. 2010 - present	MDG-F	Oromia	Teltele	JP

						Employee
Mr Mehammed A/Kadir	Region Focal Person	May 2010 – Aug. 2011	PARDB	Afar		
Mr Teshome Kebede	Region Focal Person	Sept. 2011 – July 2012	PARDB	Afar		
Mr Mohammed Seid	Region Focal Person	August 2012 - present	PARDB	Afar		
Ms. Rukia Yusuf	Programme Officer	Dec. 2010 - present	MDG-F	Afar	Telalak	JP Employee
Mr. Tewodros Sibihat	Programme Officer	Dec. 2010 - present	MDG-F	Afar	Adaa'r	JP Employee

Annex 10: Summary Table of Findings

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
Outcome 1. Climate change mitigation and adaptation options for pastoralists mainstreamed into national/sub-national development frameworks (development plans, strategy, policies)							
1.1	CC related risks/ vulnerabilities of the pastoral communities at national, four regions and six districts identified and assessment report produced	1.1.1 Establish and/or strengthen Climate Change Clearing House Mechanism to exchange information on climate change adaptation at national level and develop Ethiopian Climate Action Registry Information System	No	1	The Ethiopian Climate Change Registry Facility was developed by a consulting firm (Cybersoft P.L.C) to serve as the Climate Change Clearing House Mechanism. It was developed by strengthening the already existing web site of EPA(www.epa.gov.et).	EPA	On 12/01/13 website not working On 05/02/13 EPA website working but CC Clearing House page (www.epa.gov.et/ClimateClearingHouse/default.aspx) only showing information on POPs (i.e. nothing to do with CC). EPA reported that the 3 staff trained to manage pages have left the service – recruitment is underway. Site reportedly will include copies of reports etc produced by the MDG-F JP. Will be relevant for districts, but of limited value at woreda levels or below, as these do not yet have access to the internet
		1.1.2 Provide IT materials to 4 regions and 6 districts to strengthen climate information exchange	No. Materials		All the 4 regions and 6 woreda were supplied with computers, photocopy	EPA	Useful for EPA offices in the regions and woreda to report to this programme and for the future. Note – woreda (districts) generally do

[29] Compiled using the summaries of accomplishments to Dec 2012 prepared by the regions, EPA and the PCO

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
					machines and scanners each. Additionally, all the 6 woreda were supplied with fax machines and Printers. The computers were uploaded by the software used to exchange climate change information through the climate registry facility.		not have access to the internet, thus training on use of the website for that level seems premature
1.2	CC related federal and four regional states policy and strategy gap analysis report produced and policy proposal prepared	1.2.1 Publish the National, four regions and six districts CC Strategies and action plans	No. of documents	11 documents	The national, four regions' and six districts' climate change strategy and action plans were prepared by the task teams representing the different offices /bureaus/ sectors of each 4 regions, 6 districts and federal	EPA	Accomplished and being distributed

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
					respectively. The documents are being edited by a consultant firm called **Eminence**. The publication of the documents would start soon after the completion of edition.		
1.3	Federal, four regional states and six districts CC adaptation/ mitigation strategy, communication strategy, action plan prepared	1.3.1 Prepare communication strategy and public awareness toolkits and undertake stakeholders consultation to improve the contents and quality of the information strategies and action plans	No. of documents		The communication strategy and public awareness toolkits prepared by the EPA, reviewed, commented and enriched by the concerned stakeholders is under the process of publication by the consultant firm called Wiya Trading.	EPA	Accomplished and hard copies being disseminated in Amharic. Soft copies sent to regions for translation into local languages then will be published. IC could not read documents in detail as in Amharic. Communications strategy lacks diagrams / visuals – suggesting lack of use of proven tools such as rain calendars, resource mapping, mental models and participatory scenario development for CC adaptation.
		1.3.2 Publish the National, four regions	No. of documents	11 docume	The national, four regions' and six	EPA	Accomplished in Amharic and English

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		and six districts CC Strategies and action plans		nts	districts' climate change strategy and action plans were prepared by the task teams represented from different offices /bureaus/ sectors of each 4 regions, 6 districts and federal respectively. The documents are being edited by a consultant firm called **Eminence**. The publication of the documents would start soon after the completion of edition.		
1.4	Pastoralist adaptation measures integrated into the PASDEP	Not detailed			Included in Growth and Transformation Plan (2010/11-2014/15) – which carries on from PASDEP		Accomplished

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
1.5	Mainstreaming methodology, tools/manuals/indicators/ training manuals developed	Prepare toolkits of different adapation appropriate technologies and practices (in English and Amharic and other local languages)	No. of technologies	1 document	A toolkit of 14 different appropriate adaptation technologies which have been proved and checked at different parts of the country has been prepared in Amharic	EPA	IC could not read documents in detail as in Amharic. Adaptation and mitigation document very wide ranging, yet omits key options for pastoralists (see FAO, 2010b).
		Publish and disseminate tools and toolkits on different adaptation appropriate technologies and practices	No. of documents	Not set	The adaptation technologies are under the process of publication and their dissemination would follow the completion of its publication.	EPA	Published and hard copies being disseminated via EPA offices.
Outcome 2. Government and pastoral institutional capacities strengthened to effectively respond to the climate change risks and challenges							
2.1	Federal/regional/ local practitioners and community members enabled to plan/ manage CC adaptation and	Undertake ToT for federal & regional experts/specialists on CC adaptation planning, implementation,	Persons	60	50	MoA	

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
	handle resource based conflicts	M&E and on resource related conflicts prevention and management					
2.2	Parliamentarians, federal/regional/district civil servants, selected pastoral community leaders sensitized to make them responsive to the CC adaptation needs of the pastoral community	Under take study tour/peer learning for Parliamentarians, Sectoral, regional and district decision makers, including EPA, and MoA	No. of tour	2		EPA	The budget allocated for this activity has shifted to the procurement of IT materials in response to the capacity needs identified by the assessment made as the budget requested to address the capacity needs has not been released from the UNEP. Very disappointing that decision makers not sensitized to the adaptation needs of pastoral communities.
2.3	Existing capacity of pastoral communities institutions and relevant government institutions assessed, gaps identified and needs defined	*2.3.1* Assess and define capacity needs of existing pastoral communities, institutions and relevant federal, regional and local government institutions - Federal Level; EPA, MoA, MoPA, MoWE - Four regions BoARD, BoWE & regional EPAs; -6 district	No. of institutions, regions, and woredas		Task forces represented from different sectors/bureaus/ offices at federal, regional and district levels were trained on the preparation of the capacity needs of their respective regions or woredas. Accordingly, they	EPA	Links to aspects of Outcome 1

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		ARDOs			prepared the climate change adaptation capacity needs of the different sectors/ bureaus/offices at the federal, region or district respectively.		
		2.3.2 Address immediate and critical capacity needs, as identified in the capacity need assessment of key government and community institutions at four regions(BoARD,BWE,regional EPAs), 6 districts ARDOs are addressed	No. materials/trainings		Based on the capacity needs identified by the assessment made at the federal, regional and district levels, a critical capacity need identified was to provide 6 laptop computers and 6 LCD projectors for the 6 districts and 4 desk top computers for the 4 regions are under the process of procure.	EPA	Achieved

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
					A workshop is to be organized in the near future on different issues of CC to build the capacities of experts represented from different sectors, bureaus and offices at the federal, regional and district levels.		
2.4	Immediate and critical capacity needs of key government and community institutions strengthened	Procurement and supply equipment; hardware and software maintenance, spare part and Insurance	Lsm	Lsm	Lsm	MoA	2.3.2?
		Recruit and deploy programme officers (Range land management Expert or Environmentalist)	No	10	10	All IPs	Good caliber POs found in each programme area
		Reorient regional & woreda IPs on	Frequency	4	4	MoA	Proved very important to enable JP to achieve its targets post MTE

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		Programme improvement plan & provide technical backstopping					
		Prepare phasing over guideline and ensure the implementation of exit strategy (Phasing over Strategy) Report No	No	1	1	MoA	
		Broadcast programs on CC adaptation issues in different JP implementing area languages (including local FM radio & TV)	Event	3	3	MoA	Small number targeted, but at least achieved
		The promotion of CC adaptation integrated and articulated via Mass Run planned by Green promotion on climate change & increasing global warming by 30 sponsoring 30 Banners	Event	1	1	MoA	
		Link with selected civil society organizations to MDG related	Event	4	4	MoA	

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		adaptation advocacy: Select related HE/ATVET institutions in the 4 IP regions and communicate for strategic partnership and support projects /researches on CC adaptation programs using these strategic partners from HEIs around and use the research outputs for public communications.					
		Motor Bikes	No	9	8	4 Regional IPs	Delivery delayed by years due to tax issue – some bikes still in Addis – POs used woreda motor bikes. Provision of only motor bikes probably constrained number of women willing to take-on PO role, this issue of equality arises.
		Procure desktop with UPS	No	6	6	All IPs	
		Procure lap top	Pcs	14	13	All IPs	
		Procure printers	No	6	6	All IPs	
		Pedestal table	No	7	7	Afar + Oromia	
		arm chair	No	5	5	Afar + Oromia	

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		guest chair	No	11	11	Afar	
		shelves	No	3	3	Afar	
		Office Supplies					
		– photocopy paper	Ream	410	410	Somali, Afar	
		– printer cartridge	Pkt	130	130	Somali, Afar	
		– ball point pen	Pkt	112	112	Somali, Afar	
		– paper tray	Pcs	15	15	Somali, Afar	
		– Boxfile	Pcs	246	246	Somali, Afar	
		– Photocopy Machine tonner	Pkt	29	29	Somali, Afar	
		Scanner	No	1	1	SNNPR	
		CDMA	No	1	1	SNNPR	
		GPS Apparatus	Pcs	9	9	Somali	
		GIS Software	Pcs	1	1	Somali	
		LCD projector with screen	No	5	5	Afar, Oromia	
		Photo Camera digital	No	2	2	Oromia	
		Video Camera	No	2	2	Oromia	
		5kVA generator	No	2	2	Afar	
		Desk top Computer	No	4	4	Oromia	
		Laptop	No	8	8	Oromia	
		Printer	No	3	3	Oromia	
		Train staff on GIS application for CC and adaptation (for regional & Wereda	No	24	24	Afar + Somali	

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		experts)					
		Amplifier and 100 watt speaker and other office equipment	Pcs	4	4	Somali	
2.5	Critical mass of skilled trainees on adaptation programme management and early warning and response systems deployed	Undertake Training Of Trainers (TOT) for regional experts	No	173	161	Afar +Somali	Slightly below target achieved
		Undertake training for regional Woreda experts, Extension Agents by trained regional experts,	No	630	746	Afar +Somali	Exceeded target
		Undertake community training for kebele leaders, elderly people, religious leaders, youth and leaders	No	120	145	Somali	Exceeded target
		Undertake training for school teachers	No	30	76	SNNPR	Exceeded target
		Undertake local	Meeting No	2	2	Somali	Accomplished

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		institutional analysis to explore scenarios of coordination arrangements					
		Undertake consultation workshop with pastoral affairs standing committee and other stakeholders to initiate and agree on the mode and establishment of local CC pastoral coordination mechanisms	Participant No	124	114	Somali	Slightly below target achieved
		Establish and/or strengthen local CC pastoral coordination mechanisms (a body and secretariat)	No	2	2	Somali	Accomplished
		Conduct awareness creation workshop on better utilization of rangeland resources for community members	No	20	20	Somali	Accomplished
		Undertake training for	No	40	40	Somali	Acocmplished

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		school teachers of the pilot woredas through trained regional and woreda experts.					
2.6	Information on CC mitigation and adaptation packaged and disseminated	Adapt and prepare information package in local language	Document	6	6	Afar + Somali	Accomplished
		Produce and dissemination of climate mitigation/adaptation information through electronic media					? not electronic – but posters etc probably more appropriate. Would have been usefully used to provide diagram info on posters for local beneficiaries (to benefit those not literate) rather than JP publicity.
		– posters	Pcs	500	500	Somali	
		– bulletins	Pcs	500	500	Somali	
		– calendars	Pcs	500	500	Somali	
		– Stickers with Logo	Pcs	100	100	Somali	
		– Key holder	Pcs	25	25	somali	
		Produce and disseminate climate mitigation/adaptation information through Somali Radio program (in broadcast duration)	Weeks	24	21	Somali +Afar	

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		Produce and dissemination of climate mitigation/adaptation information through print media				Afar	
		Adapt and prepare information package in local language	Manuals & Modules	4	4	Afar	Accomplished
2.7	Six districts user friendly adaptation early warning and response mechanism (indicators, manuals, working procedures for info exchange) produced and presented					EPA	In progress by EPA
2.8	Tailored and user friendly adaptation early warning and response mechanism operationalized					EPA	In progress by EPA
2.9	Local pastoralist CC response coordination						

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
	mechanism established						
		Organize study tour or provide training to Strengthen local CC pastoral coordination mechanisms (a body and secretariat)	Persons	41	31	Afar +Somali	Difference for Somali
2.10	Regular monitoring system established and functional	Undertake regular monitoring of Regional IPs, and prepare and submit quarterly and annual performance reports	Frequency	36	26	All IPs	Once within a Quarter
Outcome 3. Pastoral community coping mechanism/ sustainable livelihood enhanced							
3.1	Baseline data generated on: potential, accessibility, management, availability and alternatives in: water, livestock, rangeland and market. in the selected villages of the 6 districts	Conduct Baseline Survey	Report	1	1	MoA	Not conducted at appropriate time, very wide-ranging and omitted focus on programme targets, also no link to MDGs and gender mainstreaming
		Conduct preliminary assessment to ensure	Report	7	7	All IPs	Accomplished

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		feasibility and cost effectiveness of different water schemes in the selected woreda/s					
		Produce design and specification for the scheme to be constructed	Doc	6	7	All IPs	Accomplished
		Conduct assessment of best practices of income diversification of the two pilot Woredas and provide recommendation on deliverable diversification options for the community	Doc	1	1	Somali	
		Reorientation on IGAs to regional, wereda and PAs, and provide technical support	Frequency	4	4	MoA	
3.2	Access to functional water schemes improved on a sustainable basis in selected villages (2-3 villages per district) of the six	Construct Cisterns	No	8	8	All IPs	No monitoring included in JP on potentially deleterious environmental impacts of year-round water supply on surrounding land

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
	target districts						
		Construction of large water birkas	No	4	7	Somali + Afar	Difference for Somali
		Construction of hand dug shallow wells	No	23	23	Somali + Afar	
		Construct hand dag wells (deeper) in the target woredas	No	10	5	Afar	Drilling is completed installation of pump is begun
		Construct Community Pond	No	3	3	Oromia	
		Establish WATSAN Committee	No	34	20	All IPs	Highly important
		Construction of reservoir	No	1	1	Somali	
		Rehabilitation of existing water facilities	No	18	8	Somali + Oromia	Failed to reach target
		Procure water treatment chemicals	Lsm	Lsm	Lsm	Somali	
		Undertake technical support and capacity building in cooperation with MoA, FAO and PCO on water scheme development and management	Frequency	4	3	Somali	Highly important
		Conduct workshop on sanitation and	workshop	4	3	Somali + Oromia	Highly valued by participants

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		hygiene for community water managing committees					
		Training for water management committees & users (on water schemes maintenance & management	No	75	75	All IPs	Highly valued by participants
		Training on water harvesting facility construction, maintenance and management for water committee (for 34 water committees)	No	75	75	All IPs	Highly valued by participants
		Support water management committees with supply of basic materials for maintenance of water scheme	No of committees	18	16	All IPs	Important for sustainability of interventions
		Training for hygiene committees in the target woreda committee members	No	124	95	All IPs	Highly valued by participants
		Experience sharing for	No	47	24	Afar	

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		pastoralists and experts within the region (5 region, 32 community representative & 10 woreda experts)					
3.3	Systems and technologies that enhance availability of feed resources promoted in selected sites (2 to 3 villages) of the six districts improved	Conduct participatory assessment on viability of potential income generating activities	No	1	1	MoA	Well planned and executed – very sound document – which should be widely disseminated by MoA, also to other donors / NGOs in future
		Area closure for rangeland rehabilitation and reseeding in target kebeles	Ha	326	376	All IPs	Lacked pre-treatment assessment or monitoring of impacts.
		Promote control and management of bush and invasive plants in target kebeles	Ha	1967	750	All IPs	Lacked pre-treatment assessment or monitoring of impacts.
		Undertake cross visits for community members and regional and woreda experts in consultation with	No	73	92	All IPs	Difference for Afar

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		FAO, MOA and PCO					
		Establishing nursery	No	8	6	All IPs	Site in Harshin (Somali) very exposed and challenging – perhaps more technical support was required here (e.g. from FAO)
		Plant seedlings	No	514,914	362,500	All IPs	Little evidence of surviving seedlings apart from in village locations. This did not seem to be a very effective means to increase tree cover in rangeland. ? how much beneficiaries were committed to tree planting / how much they had been trained – a particular issue where seedlings given away free
		Promote control of soil erosion (gully treatment)	ha	72	67	All IPs	Where seen, seem to be effective – but most in early stages
3.4	Mechanism to increase livestock productivity and access to better market, for women and men members of the pastoralist community, put in place	Establish Livestock Marketing Cooperatives (LMC) facilitated with information service	No	18	35	All IPs	Some good results (see Section 3.4A), others clearly keen to become cooperatives but lack confidence to make more than a very small start. Challenges vary depending on geographic location, cultural factors etc. Will need on-going support from woreda Number of cooperatives alone not a good indication of their success.
		Rehabilitate animal health clinics and vet health posts	No	21	12	All IPs	Very well received – and important given predicted increases in disease challenges due to CC.

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		Conduct refresher training to vet staff (woreda staff and regional staff) in collaboration with FAO, MoA and PCO	Person	319	278	All IPs	Very well received – and important given predicted increases in disease challenges due to CC.
		Provide veterinary drugs and equipment to existing vet clinic/posts to make functional		?	?		Very well received – and important given predicted increases in disease challenges due to CC. Need to confirm numbers
		– Vet Equipment	No	18	18	All IPs	
		– Vet Drugs	Types	7	7	All IPs	
		Construct Primary Market Post	No	1	1	Oromia	Not yet operational
		Construct breed crushes	No	2	2	SNNPR	For vetenary and AI use – should be followed-up to ascertain utility.
		Introduce improved breeds of animals	No	45	44	Afar	Very limited scheme – with animals given to very poor pastoralists – probably with very limited benefits unless young of animals distributed within community.
3.5	Alternative income generating schemes identified and/or designed) to be implemented by	Organize training for Cooperative board members on cooperative principles, book	No	225	210	All IPs	Very well received – and coops visited seem well organised.

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
	both men and women of the pastoralist community over the project life and beyond	keeping, business planning etc. in collaboration with FAO, MOA and PCO					
		Provide office space, materials and necessary document to Cooperatives by linking to output 2.4	Cooperative No	18	20	Somali +Afar	Very well received
		Deliver fund for functioning of the scheme in the target woreda	No	18	25	All IPs	Very well received
3.6	Six community development fund established and made functional in the six target districts to facilitate alternative income generating activities	Design community development fund management system in dialogue with community and local authorities	Doc	4	4	Afar + Somali	Very well received
		Training for community leaders on management of community development fund	No	320	343	All Ips	Very well received
		Mobilize the women	No	1096	1096	All IPs	Very well received

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		and men community members to get organized in different groups					
		Institutionalize community development fund for sustaining the scheme (By No of Cooperatives)	No	20	30	All IPs	Very well received
		Provide training both for women and men pastoral community members on business development skills	No	315	298	All IPs	Very well received
3.7	Target community members acquire income diversification skills over the project life time	Develop or adapt technical manual in local language on the context of pastoral communities on identified scheme	Doc	1	1	Somali	not seen in FE
		Conduct assessment of best practices of income diversification of the pilot woredas and provide recommendation on deliverable diversification options	Assessment	1	0	Somali	Linked to Activity 3.3

No	Specific Outputs	Key Activities Planned	Unit	Target	Achievements[29]	Implementing Partner/s	Remarks
		for the community					
		Translation and production of training materials	Doc	2	2	Somali	Accomplished
		Train both women and men members of the communities identified viable schemes	No	360	325	All IPs	Almost accomplished
		Organize vocational skill training both for women and men members of the community on identified viable schemes.	No	360	325	All IPs	Almost accomplished

Annex 11: Budgets Allocated, Disbursed to IPs, FR Submitted by IPS, Remaining balance at IPs and Balance available[30]

UNEP

IP Name	Total allocated budget (USD) (1)	Disbursed to IPs		FR by IPs		Delivery rate (%) (2/1*100)	Utilization by IPs (%) (4/3*100)	Remaining balance with IPs		Net Remaining balance at UNEP (USD) (1-2)	Indirect support Cost Utilized
		USD (2)	ETB (3)	USD	ETB (4)			USD	ETB (3-4)		
MoA	0.00	-	0.00	-	0.00	0.00	0.00	-	0.00	0.00	
EPA	393,065	299,375.95	4,643,059.92	-	3,124,739..28	67.29	79.42	-	1,518,320.64	185,184.97	
Afar	0.00	-	0.00	-	0.00	0.00	0.00	-	0.00	0.00	
Somali	0.00	-	0.00	-	0.00	0.00	0.00	-	0.00	0.00	
SNNP	0.00	-	0.00	-	0.00	0.00	0.00	-	0.00	0.00	
Oromia	0.00	-	0.00	-	0.00	0.00	0.00	-	0.00	0.00	
7% Indirect support cost	29,586	?	?	?	?	?	?	?	?	?	N.A
TOTAL	**422,650**	**299,375.95**	4,643,059.92	**-**	3,124,739..28	**63.44**	**79.42**	**-**	1,518,320.64	**185,184.97**	

UNDP

IP Name	Total allocated budget (USD) (1)	Disbursed to IPs		FR by IPs		Delivery rate (%) (2+5/1+6)* 100	Utilization by IPs (%) (4/3*100)	Remaining balance with IPs		Direct Payment + Procurement by UNDP (USD) (5)	Budget reprogramed for C&A use by PCO (USD) (6)	Net Remaining balance at UNDP (USD) (1-2-5+6)	Indirect support Cost Utilized
		USD (2)	ETB (3)	USD	ETB (4)			USD	ETB (3-4)				
MoA	233,251.44	171,605.99	2,959,984.89	-	1,936,023.38	85.13	61.12	-	1,023,961.51	41,827.96	+24,407.47	38,315.04	
EPA	17,911.80	11,000.00	188,740	-	188,609	99.88	99.93	-	131.00	0.00	0.00	6,911.80	
Afar	285,298.89	231,493.79	3,871,627.49	-	3,458,664.74	86.38	89.33	-	412,962.75	12,057.15	-3,335.47	38,412.48	
Somali	534,936.00	441,830.52	7,708,204.87	-	5,723,029.73	88.55	74.24	-	1,985,175.14	21,179.62	-12,032	59,893.86	
SNNP	106,987.20	101,394.37	1,747,208.58	-	1,423,454.33	99.98	81.47	-	323,754.25	3,771.52	-1,800	21.31	
Oromia	261,523.44	161,099.00	2,642,037.00	-	1,564,705.36	64.84	59.22	-	1,077,331.64	3,771.52	-7,240	89,412.92	
7% indirect support cost	108,380.23	?	?	?	?	?	?	?	?	?	?	?	N.A
TOTAL	**1,548,289.00**	**1,118,423.67**	**19,117,802.83**	**-**	**14,294,486.54**	**83.82**	**74.77**	**-**	**4,823,316.29**	**82,607.77**	**0.00**	**232,967.41**	

[30] at 6 Feb 2013

FAO

IP Name	Total allocated budget (USD) (1)	Disbursed to IPs		FR by IPs		Delivery rate (%) (2/1*100)	Utilization by IPs (%) (4/3*100)	Remaining balance with IPs		Net Remaining balance at FAO (USD) (1-2)	Indirect support Cost Utilized
		USD (2)	ETB (3)	USD	ETB (4)			USD	ETB (3-4)		
MoA	14,927	15,000	246,300.00	-	246,300.00	100.49	100.00	-	0.00	-73	
EPA	0.00	-	0.00	-	0.00	0.00	0.00	-	0.00	0.00	
Afar	449,304	451,516.05	7,909,363.83	-	4,580,929.59	100.49	57.91	-	3,328,434.24	-2212.05	
Somali	842,445	793,283.61	11,157,469.45	-	8,611,050.46	94.16	63.55	-	2,546,418.99	49161.39	
SNNP	168,489	126,435.70	2,137,271.93	-	1,841,785.81	75.04	86.17	-	295,486.12	42,053	
Oromia	411,862	414,315.82	7,152,958.65	-	3,404,052.7	100.59	47.58	-	3,748,905.95	-2453.82	
7% Indirect support cost	142,034	?	?	?	?	?	?	?	?	?	N.A
TOTAL	**2,029,060**	**1,800,551.00**	**28,603,363.86**	**-**	**18,684,118.56**	**88.73**	**65.32**	**-**	**9,919,245.30**	**353,565.58**	

Note

- UNDP inception workshop cost not added
- 7% indirect support cost utilized by UNDP, FAO & UNEP not available
- FR for Afar = ETB37,383.55 not included in the report (UNDP)

Annex 12: The use of Prosopis to improve food security in famine-prone areas of Africa

Prosopis is a drought-resistant, nitrogen-fixing tree, which is extremely hardy and can grow almost anywhere[31] – and dominates many of Ethiopia's rangelands.

Prosopis trees are particularly versatile, multipurpose natural resource which can provide a wide range of benefits for the local economy and environment. Pods can be used as human food and both pods and leaves are suitable for livestock fodder. The wood produces an attractive timber as well as high quality charcoal and fire wood. Additionally, trees can provide shade for livestock and people, soil stabilisation and, as they are nitrogen fixing can also be used to improve soil fertility. Over the past two centuries a small number of *Prosopis* species from Latin America were introduced to reforest the drylands of Africa and Asia, of these introduced American species in most countries *Prosopis juliflora* was the most frequently introduced. *Prosopis* was introduced to the dry regions of Africa because it is drought tolerant and hardy, but these same qualities can mean that if *Prosopis* is left unmanaged, it can become an invasive weed and can spread quickly. Although in some areas the trees are valued as a source of fuel wood or charcoal and provide a source of income, where *Prosopis* has not been managed appropriately, it may form thickets and is regarded as a nuisance to be eradicated. Eradication however is very difficult once the tree has become established. Research suggests that where *Prosopis* has become a nuisance, local people do not know who to manage the stands and there have little idea of the wide range of products the tree could provide. Evidently traditional knowledge and management techniques were not transferred along with the plant material from the native range. In the Americas, *Prosopis* was the main staple food for many indigenous people particularly during times of drought, and it is still eaten today in those regions. There is potential then to develop and implement local management techniques sub-Saharan Africa to best utilise *Prosopis* to provide an additional source of human food, potentially improve food security, but also to help to manage its spread.

The potential and the limitations

- Global experts presented several arguments and issues which are summarised below:
- *Prosopis* trees are one of the most widespread and numerous of any tree species in the drylands.
- They are also one of the most ***under-utilised*** trees, in particular their potential as a source of human food.
- The beans were a ***staple food*** in the Americas where they are native, and are still eaten today.
- *Prosopis* was introduced to Africa, but without the ***indigenous knowledge***.
- There is an urgent need to ***promote*** the use of *Prosopis* beans to improve ***food security and income***
- ***Exploiting*** the beans will also reduce the further spread of *Prosopis* to unwanted areas.
- Prosopis is largely regarded as a ***pest*** in the drylands, we need to focus our attention to change perceptions.

Participants identified the following two priorities:

1. Raising awareness; to the general public, government health ministries and extension services, NGOs, the humanitarian and aid communities, and donors. This requires clear and targeted messaging, training and demonstrations, supported by simple guides and other publications. Farmers at the local level will need to be considered as to their needs and the support they require.

[31] Source: GO (2012)

2. Building partnerships; with research and development organisations, projects and initiatives, government departments and private enterprises. The aim is to build the potential of *prosopis* in improving health, nutrition and food security into larger and related programmes.

Key Messages

- The need to change perceptions at all levels, from pastoral communities to government ministries and international organisations, that *Prosopis* is a great asset and not a useless weed.
- The beans are of high nutritive value, and they are simple to process, store, and prepare into foods.
- Prosopis trees also produce many other valuable resources, including timber, fuel, fodder and honey.
- Various tree products are already commercialised internationally, although there is scope to increase trade.
- Promote 'control by utilisation' as a win-win strategy to reduce negative ecological impacts and maximise nutritional and livelihood benefits.
- Prosopis currently plays an important role in climate change mitigation, and could be used in carbon trading.
- It has enormous potential in climate change adaption, as a reliable and sustainable source of food especially when annual crops fail.

Annex 13: Final Evaluation Audit Trail

Action	Date
Submission of Draft Final Report to UNDP / PCO (officially 15 working days after field mission)	18/02/13
Comments on Draft Final Report from UNDP / PCO to IC	01/03/13
Final Report (taking into account all comments sent on 01/03/13) submitted to UNDP by IC	07/03/13
Logos of agencies added to Final Report submitted to UNDP by IC	13/03/13

Empowered lives.
Resilient nations.

Environment Protection Authority

and

Ministry of Finance and Economic Development