INTERIM NARRATIVE REPORT FOR THE EC FUNDED BIOFUEL PROJECT
2012-2013

1. Description

1.1. Name of beneficiary of grant contract: WWF Zimbabwe

1.2. Name and title of the Contact person: Dr Enos Shumba, Interim Country Director

1.3. Name of partners in the Action: Environment Africa

1.4. Title of the Action: Bio-fuel Policies and Practices for Sustainable Socio-economic Development in Zimbabwe

1.5. Contract number: +263 4 252533/4

1.6. Start date and end date of the reporting period: 1 February 2012 to 31 Jan 2013

1.7. Target country(ies) or region(s): Zimbabwe

1.8. Final beneficiaries &/or target groups[1] (if different) (including numbers of women and men): Local communities, the Zimbabwe nation and SADC Member States.

1.9. Country(ies) in which the activities take place (if different from 1.7): Zimbabwe

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2. Assessment of implementation of Action activities

2.1 Executive Summary of Action Plan

National and district stakeholders who will constitute discussion forums on climate change, bio-fuels and livelihoods were identified and concientized on the need for a national bio-fuels policy. At national level, policy makers from three key ministries went on a familiarization tour of India's bio-fuels industry. The tour made them aware of the critical roles that their respective ministries should play in the policy making process in order to adequately address its four policy pillars (viz. economic, social, environmental and institutional). A background paper on climate change, bio-fuels and the livelihood nexus was produced. It will be shared with the national and local discussion forums.

A germplasm characterization trial established at Chiredzi Research Station in the first year was written off and re-established at Kadoma Research Station on a block with access to supplementary irrigation. Two jatropha provenances were evaluated at 20 school gardens. The provenances showed no significant differences in key plant growth parameters at 32 weeks after transplanting. Two agronomic trials on plant spacing and soil fertility were planted out on 12 farms. There were no significant treatment differences in plant growth parameters measured at 32 weeks after transplanting.

Some 873 farmers planted out 15 000 jatropha seedlings as live hedges around their homesteads, fields and gardens in Mudzi district. A technical visit to Tanzania contributed to the incorporation of electric powered oil presses into the Project. Two centralized oil pressing centres powered by electric press machines were established and 6 tons of seed were sold by farmers at the centres. Manual presses were sited at remote locations with poor access to the electric press machines and 14.1 tons of seed were purchased. Laundry soap and bath soap where identified as the main products to be produced and marketed in the two districts.

2.2. Activities and Results

2.2.1 Establish and support national and local discussion forums on climate change, biofuels and livelihoods

Stakeholders for the national and local discussion forums on climate change, bio-fuels and livelihoods were identified and conscientized on the need for a national bio-fuel policy. At district level, climate change awareness sessions were held for members of Environmental Sub-committees of both Mudzi and Mutoko District Councils. At national level, one senior official each (Director level) from the Ministries of Energy and Power Development; Agriculture, Mechanization and Irrigation Development; and Environment and Natural Resources Management went on a familiarization tour of India's bio-fuels industry. Key observations from the visit were that:

- India's bio-fuels industry is guided by a well articulated national bio-fuels policy and strategy;
- Functional public, private, community partnerships (PPCP) are critical for a vibrate bio-fuels sector;
- Given that bio-fuels is a cross cutting subject, there is need for effective inter-ministerial coordination; and,

- India has innovative local level jatropha processing technologies that Zimbabwe can learn from.

More importantly, the tour gave the policy makers an opportunity to establish and understand their respective roles in the bio-fuels policy pillars namely economic, social, environmental and institutional. The pillars were elaborated in last year's Narrative Report.

2.2.2 Produce background paper on climate change, bio-fuels and livelihood nexus in Zimbabwe

A background paper on climate change, bio-fuels and livelihood nexus in Zimbabwe was produced. The paper provides an overview of climate change, its causes and impacts on various sectors of Zimbabwe's economy. It also proposes appropriate mitigation and adaptation strategies at various scales (viz. national, sub national and local). It will be presented at a national workshop on climate change, bio-fuels-livelihood nexus in June 2013.

2.2.3 Draft a comprehensive national policy and strategy on bio-fuels

Focus was on sensitising key national stakeholders on the draft national policy guidelines prepared by WWF and presented in last year's Narrative Report. The paper proposes four pillars of a national bio-fuels policy namely economic, social, environmental and institutional. It is part of background material for national and local discussion forums on climate change, bio-fuels and livelihoods.

2.2.4 Collect and evaluate Jatropha germplasm for various niches

a) Research Station evaluation

A germplasm characterisation and evaluation trial established at Chiredzi Research station was written off due to the severe drought of 2011/12. The trial was replanted at Kadoma Research Station in January 2013. The planted block has access to suplimentary irrigation.

b) On-farm evaluation of provenances in school gardens

Two of the eight provenances collected from six districts across Zimbabwe (see last year's Narrative Report) were planted out as live hedges at 10 school gardens in each of the two districts in February 2012. Survival rates and plant heights across the two provenances in Mudzi district are given in Table 1. There were no significant differences in these parameters some 32 weeks after transplanting. However, survival rates were very low at two of the schools probably due to moisture stress.

Table 1: Growth parameters of two provenances planted at 10 schools in Mudzi District at 32 weeks after transplanting

Name of school	Survival rate (%)	Plant height (cm)
Chingwena	81	30
Shinga	76	34
Chimukoko	73	29
Nyamanyora	94	24
Chingamuka	94	73
Kondo	52	19

Muzezuru	48	24
Kapotesa	71	25
Kasiyo	82	23
Masarakufa	97	34

c) On-farm agronomic trials

Plant density and fertility management trials were carried out by 6 farmers each in Mudzi and Mutoko districts. The trials were laid out as hedges planted to a local provenance. They consisted of the following treatments:

- On-farm trial 1: Three plant spacings of 20cm, 30cm and 50cm; and,
- On-farm trial 2: Four fertility regimes of Compound D, cattle manure, jatropha cake and control.

Both trials were assessed for a number of growth parameters that included survival rate and plant height. There were no significant treatment differences for both parameters measured at 32 weeks after transplanting.

d. Capacity building

A total of 37 people from the Department of Agricultural Technical and Extension Services (AGRITEX) and schools hosting on-farm provenance evaluations received basic training in research methods and data collection. The training, together with the garden evaluations, helped the participating schools to strengthen their environmental awareness and educational out-reach initiatives. They now provide entertainment at major district events such as seed fairs, green shows and national tree planting days through poems, drama and songs that focus on the environment and sustainable energy issues.

2.2.5 Conduct studies on jatropha processing, utilization and marketing at cottage industry, national and international levels

A technical visit was undertaken by Environment Africa and the Project Manager to Tanzania to learn from that country's experience in jatropha processing; local level value addition; and the technologies used. Two machines namely the modified manual oil press and the electric powered oil press were considered to be of value to the Project by the visiting delegation. The latter machine has since been incorporated into the project.

2.2.6 Develop "Best Practice Models" for Community Level Testing in pilot districts

Jatropha feedstock planting was promoted as live hedges in the two districts. This was in recognition of the fact that farmers are already using this method which does not compete for agricultural land. Some 15 000 seedlings were transplanted by 873 farmers in Mudzi district. In Mutoko, jatropha planting has just started as the district had no jatropha oil processing activities before the Project.

2.2.7 Facilitate community level production, processing and marketing of jatropha products in pilot districts

A centralized oil processing centre was established in each district following the purchase of two electricity powered oil process machines. Farmers sold 5 tons and 1 ton of seed to the centres in Mudzi and Mutoko respectively and were paid on delivery. Two people were identified from EAGs falling within each oil process centre for training in the operation of electric press machines. In Mutoko district seven manual press machines were purchased and located at remote sites with poor access to the centralized oil press centres. Farmers from seven Environmental Management Groups (EAGs) hosting the manual press machines were trained in oil pressing. On the other hand, Mudzi district had 18 such machines before the Project commenced. Mudzi farmers sold 14 tons while those in Mutoko only sold 120 kg to the manual press centres. Laundry soap and bath soap are the key products recommended for production from jatopha oil in the two districts. Farmers at both electrical and manual oil process centres received training in soap making with emphasis on product quality and packaging.

Use of a maual oil press machine being demonstrated in Mutoko district

2.3 Activities that was planned and not implemented

Nil

2.4 Assessment of the results of the Action to date

Given its cross cutting nature, the national bio-fuel policy making process had a slow start. However it has since pick up, especially after the tour of India by policy makers from the three focal ministries. The writing off of a provenance evaluation trial at Chiredzi Research Station and the subsequent relocation of the trial to Kadoma Research Station put back the evaluation process by a season. However on-farm provenance evaluations and on-farm agronomic assessments are on course. The establishment of oil processing capacity and purchase of seed from farmers for oil pressing progressed well.

A Project Steering Committee meeting was held in June 2012 to review progress reports for year one (2011/12) and approve work plans and budgets for year two (2012/13). The

Committee consists of representatives of Environment Africa, the University of Zimbabwe, the EC Delegation in Harare and WWF Zimbabwe.

The project was evaluated by an EC monitor under the ROM Mission during the period 29 October to 2 November 2012. Indicative scores shared at a debriefing meeting at the EC were as follows:

Quality of Project Design: B
Efficiency: B
Effectiveness: B
Impact prospects: B
Potential sustainability: C

Contracts: No contracts above €10 000 were issued during the reporting period.

2.5. Updated Action Plan

Year 3													
	Semester 1						Semester 2						
Activity	Month	2	3	4	5	6	7	8	9	10	11	12	Implementing body
Preparation Activity 1.1. Support national and local discussion forums on climate change, biofuels and livelihood isses													WWF & EA
Execution Activity 1.1. Support national and local discussion forums on climate change, biofuels and livelihood issues													WWF & EA
Preparation Activity 1.2													

Preparation Activity 1.3. Draft a comprehensive national policy and strategy on biofuels													WWF
Execution Activity 1.3. Draft a comprehensive national policy and strategy on biofuels													WWF
Preparation Activity 2.1. Collect and Evaluate Jatropha germplasm													UZ, DR&SS & WWF
Execution Activity 2.1. Collect and Evaluate Jatropha germplasm													UZ & DR&SS
Preparation Activity 2.2. Conduct jatropha agronomic research for various niches													UZ, DR&SS & WWF
Execution Activity 2.2. Conduct jatropha agronomic research for various niches													UZ & DR&SS
Preparation Activity 3.1. Develop jatropha best practice models for community level testing in pilot districts													EA & WWF

Execution Activity 3.1. Develop jatropha best practice models for community level testing in pilot districts													EA & WWF
Preparation Activity 3.2. Facilitate community level production, processing and marketing of jatropha products in pilot districts.													EA & WWF
Execution Activity 3.2. Facilitate community level production, processing and marketing of jatropha products in pilot districts.													EA & WWF

3 Partners and other Co-operation

3.1. Formal Partners

Environment Africa

Environment Africa has been working on community level jatropha processing and utilization in Mudzi for several years. It has established excellent working relationships with various stakeholders which WWF and the Project are benefiting from. The NGO facilitated the technical visit to Tanzania in which its Director participated.

3.2. State Authorities

The formal state Associates on the Project are the Ministry of Energy and Power Development; the University of Zimbabwe; the Department of Research and Specialist Services; and the Ministry of Environment and Natural Resources.

a. Ministry of Energy and Power Development

The Ministry is the formal State actor (associate) on the Project. It is working with WWF especially in driving the policy component of the Project. The Director of its Renewable Energy Department participated in the India visit.

b. University of Zimbabwe

The University of Zimbabwe has used its technical expertise to lead the research component of the Project (both station and on-farm trials) in conjunction with the Department of Research and Specialist Services of the Ministry of Agriculture, Mechanization and Irrigation Development under the overall coordination of WWF. The relationship between WWF and the University has now been reviewed from partner to associate status following a briefing on local EC requirements around designation of partners. Consequently, WWF will manage the resources that were supposed to be paid to the University as a grant and reimburse the organization on a cost recovery basis.

c. The Department of Research and Specialist Services of the Ministry of Agriculture, Mechanization and Irrigation Development.

The Department of Research and Specialist Services partnered with WWF in the provision land for trial establishment at its research stations and in the management of the trial. In addition, it is working closely with the University of Zimbabwe on the on-farm trials. A Principal Director in-charge of the Department participated in the India visit. Discussions are underway to ensure that the Department assimilates the on-station evaluation trial at the conclusion of the Project.

d. Ministry of Environment and Natural Resource Management

The Ministry of Environment and Natural Resources Management, through its Environment Management Agency, is responsible for environmental impact assessments of all large scale projects in the country. It is working with WWF in the development of the environment and social pillars of a national bio-fuel policy. The Director General of the Agency participated in the India visit.

3.3. Other Organizations

a. Final Beneficiaries and target groups

Some 873 farmers in Mudzi district planted 15 000 jatropha seedlings as live hedges; 20 schools in the two districts hosted on-farm provenance evaluations in their gardens; and 12 farmers participated in on-farm agronomic trails. Farmers in both districts sold jatropha seed to oil processing centres and were paid on the spot.

b. Rural District Councils

The Mudzi and Mutoko Rural District Councils have shown a very strong interest in the Project and host the district Project teams. The teams have been incorporated into district structures and actively participate in relevant meetings such as those of the Environmental Sub-committees of Council.

3.4.Links and Synergies with other Actions

The Project is linked to the following Actions:

- Climate change related work spearheaded by the Climate Change Office in the Ministry of Environment and Natural Resources Management;
- Climate change, bio-energy and land use change work of the Miombo Eco-region Programme of WWF Zimbabwe;
- National Tree Planting Day spearheaded by the Forestry Commission in the Ministry of Environment and Natural Resources Management; and,
- Environment-clean up campaigns mounted by Environment Africa.

3.5.Build up on previous EC Grants

WWF Zimbabwe has not received previous EU grants to strengthen the same target groups.

4. Visibility of the EU

The following was achieved:

a) The following promotional materials were produced: 20 signs for on-farm trial plots and two roll up banners for use during district events/meetings; and two flying banners for national tree planting day events.

b) The Project exhibited at the Green Business Indaba 2012 where its activities and products were displayed.

c) The Project commissioned seven manual oil press machines in Mutoko district.

d) A Project brochure was developed and sent to print.

e) Content for the Project webpage is being finalised.

All these promotional materials and events carried the EU logo which was distinctly visible.

Delegates sitting behind a banner at a National Tree Planting Day in Mudzi District

The European Commission may wish to publicise the results of Actions. Do you have any objection to this report being published on the EuropeAid website? If so, please state your objections here.

NO objection

Name of the contact person for the Action: Dr Enos Shumba

Signature: ……

Location: 10 Lanark Road, Belgravia, Harare Zimbabwe

Date report due: 30 April 2013

Date report sent: 13 May 2013