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SUDAN TRANSITIONAL ENVIRONMENT PROGRAM

REPORT OF THE PROCEEDINGS OF THE 8TH TRAINING
WORKSHOP IN ENVIRONMENTAL IMPACT ASSESSMENT
AND ENVIRONMENTALLY SOUND

March 2008

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SUDAN TRANSITIONAL ENVIRONMENT PROGRAM

REPORT OF THE PROCEEDINGS OF THE 8TH TRAINING
WORKSHOP IN ENVIRONMENTAL IMPACT ASSESSMENT
AND ENVIRONMENTALLY SOUND

DESIGN FOR SMALL-SCALE ACTIVITIES HELD IN MALAKAL NATIONAL HOTEL
MALAKAL TOWN, 10TH – 14TH MARCH 2008

FUNDED BY USAID/SUDAN TRANSITIONAL ENVIRONMENT PROGRAM (STEP)

March 2008

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CAR	Central African Republic
DRC	Democratic Republic of Congo
EA	Environmental Assessment
EIA	Environmental Impact Assessment
ENCAP	Environmental Capacity Project
GoS	Government of Sudan
GNU	Government of National Unity
GoSS	Government of Southern Sudan
HIV	Human Immuno-Deficiency Virus
IDP	Internally Displaced Persons
IEE	Initial Environmental Examination
NGO	Non Governmental Organization
PEA	Programmatic Environmental Assessment
PERSUAP	Pesticide Evaluation and Safer Use Action Plan
SEA	Strategic Environmental Assessment
SFO	Sudan Field Office
USAID	United States Agency for International Development
IRG	International Resources Group
STEP	Sudan Transitional Environment Program

I. INTRODUCTION

This was the 8th EIA training Course organized and delivered by the USAID/Sudan Transitional Environment Program (STEP), and the 3rd to be conducted at the state level, in this case Upper Nile State. The course participants were drawn from the various state government ministries and non governmental organizations (NGO's). The expected number of participants to this course was about fifty but most of the GoSS personnel did not turn up due to poor communications. In total, twenty six participants attended the course in the ratio of (22Males:4Females). The course run from the 10th – 14th March, 2008.

I.1. OPENING SESSIONS

Welcoming Speech by Course Coordinator

Ms. Jane Kahata

The STEP EIA Specialist and Course Coordinator welcomed the participants to the course which she noted was going to be the 8th funded and the USAID/STEP program and the 11th overall in Southern Sudan since 2004. She appreciated the interest the participants had shown in attending the course and gave a brief overview of what the purpose of the course was.

I.2. PARTICIPANTS INTRODUCTIONS AND EXPECTATIONS

Facilitated by Fiesta Warinwa

A brief introduction session was conducted by Fiesta Warinwa. While introducing themselves, the participants were asked to give what they expected from the course. The following is a summary of participant's expectations.

- Learn more about environmental protection
- Learn about the procedures of conducting an Environmental Impact Assessment study
- Be able to effectively design an environmentally sound development project
- Learn about environmental assessment (what it means, its relationship with different types of disasters; and terms such as hazards, and vulnerability
- Learn about mitigation/risk reduction.
- Know more about advocacy, participation and involvement in environmental management
- Gain new knowledge on environment.
- Learn about how to improve the life of women
- Learn about the role of a participant in protecting our environment
- Understand better the linkage between environment and human life and health.
- Learn about methods of environmental assessment.
- Become competent in addressing environmental issues at our level so as to work with other participants around the world.

- Become more environmentally aware

I.3. PRESENTATION OF COURSE OBJECTIVES

By Ms. Jane Kahata

The course objectives were presented by Ms. Jane Kahata who noted that the objective of the course is to assist the participants to use simple environmental assessment tools to better design and implement environmentally sound activities. She elaborated that to achieve this objective; the course had been designed to help participants to:

- Develop a deeper understanding of how environmental issues can affect the sustainability of development programs and activities;
- Understand the basic Environmental Impact Assessment (EIA) process;
- Build skills to identify and assess reasonably foreseeable environmental impacts;
- Design Mitigation and monitoring measures to avoid adverse environmental impacts.

The course was therefore focused on developing the participants' capability to (a) prepare preliminary environmental assessment reports as well as provide relevant supporting materials, and (b) design mitigation, monitoring and evaluation plans for activity components with potential negative impacts and lastly (c) prepare participants for participation in some way or other during any of the various stages of the EIA process such as review of EIA reports, development of Terms of Reference for EIA studies etc. The course would also raise environmental consciousness and help create a constituency for sound environmental management practices within Upper Nile state.

I.4. COURSE TRAINERS/FACILITATORS

Jane Kahata, EIA Specialist, International Resources Group (IRG)

Fiesta Warinwa - African Wildlife Foundation (AWF)

Simon Gatheru – Environmental Consultant

[Contact details are in Annex 3 – Participants' List]

2. MODULE PRESENTATIONS

The course content was based on the ENCAP EIA training materials and PowerPoint presentations. This section focuses on:

- Issues/discussions arising from the modules that had opportunities for practical group exercises;
- Key issues raised and discussed about environmental issues in Upper Nile State and Southern Sudan
- Issues arising from the preparation and presentation of Environmental Review Reports/Preliminary Environmental Assessment Reports and Mitigation and Monitoring Plans developed after the field case study visits.
- Recommendations and Way Forward

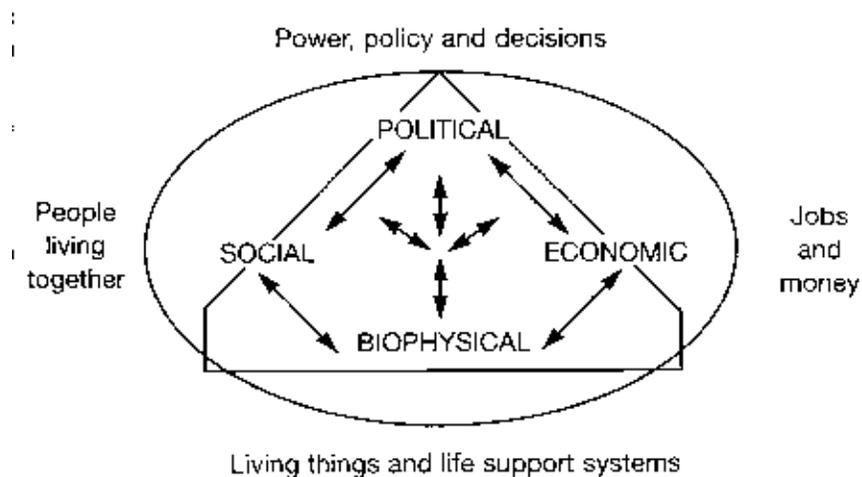
2.1. WHAT IS ENVIRONMENT?

Facilitated by Simon Gatheru

This was an introductory session aimed at assessing the participants understanding the word “Environment”. Participants were asked to write on a piece of paper what their understanding of the word environment was and also list three or more things that they considered to be parts/components of the environment. After 5 minutes the lists were collected and reviewed by the whole class.

From their responses, it can be concluded that most of them understand environment to mean their surroundings, but many only identified the biophysical aspects of the environment such as land, seas, rivers, lakes, buildings, land, forests etc. The social cultural elements of environment were left out and hardly anyone mentioned the interactions between and among the various components of environment.

The session was concluded by the facilitator who picked out on aspects/dimensions that had been left out and also emphasized the interactions between and among the various components of the environment using the O Donoghue Model shown below.



Source: (2000) Environmental Education Processes

2.2. KEY ENVIRONMENTAL ISSUES RAISED/DISCUSSED ABOUT THE BIOPHYSICAL AND SOCIAL CULTURAL PRESENTATIONS

The following environmental issues were identified by the course participants as pertinent to the Upper Nile State.

- Upper Nile state is a frontier state for Southern Sudan, as such; those returning from Khartoum and other places in the north were making their first stop over in the State. This has resulted in land degradation through deforestation to the north of the state as people cut trees for construction materials and firewood. Several forest reserves in the north had been affected by this.
- Preference of the people to live in urban areas due to insecurity in the rural areas has led to a rapid increase in the population of urban areas and Malakal town. This has constrained the adequacy of basic social facilities including water.
- There are hardly any sanitation facilities in Malakal town which has a high population. While there are cultural issues that inhibit people from using latrines, the soil texture and profile has also made it extremely difficult to construct latrines as the pits just cave as they are being dug. Even after construction, the pits must be lined from the bottom to prevent collapse.
- There was heavy use of the banks of the Nile for defecating and the participants wondered why along the river? This obviously increases the amount of water pollution with fecal coliforms.
- Cholera outbreaks have been common in Malakal town which could be attributed to poor sanitation.
- Houses have been constructed right up to the banks of the river Nile and this has increased the amount of pollution going into the river.
- Water shortages were common in Malakal town which although served by the Malakal Urban Water Supply project was intermittent. Furthermore, only 4000 housing units are connected to the main water supply pipeline.
- The water table in Malakal and most of Upper Nile state is quite low, which makes it difficult to tap ground water resources. As a result of this, there are very few boreholes in much of Upper Nile State.
- The town lacks a solid waste management system including a waste dump site. The town was therefore littered with various types of solid wastes. Solid waste dump sites need to be provided urgently.
- Awareness raising campaigns should be undertaken in Malakal and other towns on the need to improve sanitation and general cleanliness in order to improve on the state of the environment.
- There was need to construct/establish youth friendly VCT centers for HIV/AIDS. Currently, the few that exist are located within the premises of hospital and/or health cares facilities. This discouraged the youth to go for fear of being spotted by their relatives or friends.
- Community participation was weak in the design and implementation of many project activities in Upper Nile state. The local people's interests had therefore not been taken into consideration. This was in fact common in the oil exploration activities that had led to the displacement of people from all areas thought to have oil reserves.

3. FIELD CASE STUDY VISITS/PRELIMINARY ASSESSMENT FIELD WORK

The third day of the workshop was devoted to field case study visits, all of which were in town. The participants had identified the case studies of their choice the previous day. Before going to the field, they were given a brief presentation of what they were to do during the case study visits.

They then constituted the groups, also identified the group chair and rapporteurs. They were given one hour to meet as groups to discuss their assignment, assign responsibilities and agree on approach for collecting the required information. They then departed for the field at about 9.30 am.

Group 1: Case Study on Environmental Impacts of Rural Roads Rehabilitation Activities

Road section from the Airport to UNMIS Camp and Road section of the Road from the Malakal Town to Malakal State Garden

The section of the road from the airport to the UNMIS Camp has recently been rehabilitated and graveled and it was therefore in a relatively good condition. The other section of the road has not been rehabilitated in the recent past and is in very bad shape.

Group 2: Case Study on Environmental Impacts of Water and Sanitation Projects:

The Case of the Malakal Urban Water Corporation

The participants visited the Malakal Urban Water Corporation which is the main supplier of water to the town. The water is sourced from the White Nile. This water treatment plant was established in 1937 and latter upgraded in 1964.

Water is supplied through a network of pipes which was extended in 1984 and currently covers a total of 52 km, serving 4000 connections, which is only a quarter of the population. Furthermore, due to the old state of the water treatment plant, the system does not run efficiently. This means that even those that are connected are not able to access water at all times.

Group 3: Case Study on the Environmental Impacts of Small Scale Brick Making Activities

This brick making project is one of the many such sites along the River Nile to the north of the town. Brick making activities at this site started 2 – 3 years ago. The demand for bricks is quite high as more and more people start constructing dwelling houses as well as commercial and social facilities.

Group 4: Case Study on the Environmental Impacts Agricultural Development Projects:

The Case of Malakal State Garden

The case study was based on the Malakal State Garden that was started in 1965 as a Ministry of Agriculture demonstration farm. This is an integrated agricultural project that has the following components: nursery for production of tree seedlings including fruit trees; aquaculture (several ponds are in existence), an orchard and a vegetable garden. The objective of establishing the farm was:

- Production of seedlings for the citizenry;
- Demonstrate to the people how to grow vegetables
- Provide learning and training ground for agricultural extension workers.

3.1. PREPARATION AND PRESENTATION OF GROUP PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORTS

Participants assembled and were briefed on the format to use when preparing their reports. This was done to enable participants to have a common understanding of the topics to cover and how to document and present the information. The following is the format adopted for this exercise.

CONTENTS OF THE PRELIMINARY REPORT

- Project name
- Location
- Development objective of your project
- Background to the project
- Screening/screening results
- Project activities and the associated impacts of each activity for every stage of the project cycle (Planning and Design; Construction, Operation & Decommissioning)
- Description of the Environment
- Recommendations
- Presentation of environmental impacts using the interaction matrix

OBSERVATIONS MADE FROM THE PRESENTATIONS ON THE PRELIMINARY ASSESSMENT REPORTS/MITIGATION AND MONITORING PLANS

Environmental Impacts of Rural Roads Rehabilitation Projects

- The section of the road from the Airport to the UNMIS Camp had been done relatively well and the camber was still in place. Side drains had also been constructed, but the mitre drains were missing, which would mean that the water wouldn't be able to drain out.
- Very few Culverts were observed on this section of the road and their siting was considered not to be the best.
- The raising of the road bed on this section of the road may lead to an interference with the natural drainage system in the area, which would create further problems. As such, issues of drainage ought to be very carefully considered.
- Due to the nature of the soils in most of Upper Nile, the gravel for making the road had been sourced from Kosti which is very far. This group was not able to visit a borrow pit. Water percolation downwards is made difficult by the clayey nature of soils and sideways by the very flat terrain.
- Gully erosion was observed on the section of the road from the town to the Malakal State Garden. In some sections of the road, erosion was made worse by the surface run off from the town. To overcome this problem, there was a need to improve the drainage system of the entire road network in the town which had gotten clogged over the years and was not functioning.

- Rehabilitation and/or maintenance was completely absent from this section of the road since no funding had been allocated for that.
- Dust was identified as a serious impact on these roads during the dry season as it obscured visibility.
- Multiple tracks were observed on all the sections of the road that had not been rehabilitated in a long time.

Case Study 2: Environmental Impacts of Water and Sanitation Projects

- The current site of the water intake for the Malakal Urban Water Supply Project was considered inappropriate since it was downstream of many human settlements. The management of the Corporation informed the participants that the water intake was very far from human settlements by the time the plant was constructed in 1950. The town has with time expanded well beyond the intake point.
- Water supply in the town was very intermittent which affected the hygiene standards for most of the people. Even for households and facilities connected to the town water supply system, they have to use untreated water from the Nile regularly. Those who were not connected at all relied at all times on untreated water from the river that was ferried using donkeys.
- The Water Corporation had provided water collection points at various strategic points. This notwithstanding, people with vehicles still draw water from the Nile. Land degradation arising from trampling by vehicles, donkey's and human traffic at the water collection points was observed.
- There were stagnant pools of water at the water collection points. These are potential reservoirs of disease vectors.
- Water scarcity is a big problem in many parts of Upper Nile during the dry season. During the wet season, there is flooding in most places which increase the chances for water contamination.
- Poor sanitation in Malakal is a source of pollution to the River Nile. There is an urgent need to undertake public awareness campaigns about sanitation. The government and NGOs working in the town also need to invest a lot more in improving sanitation by providing latrines and possibly a town sewerage system.
- Riparian land should be protected from encroachment from housing developments. People should also be barred from defecating in the riparian zone.
- There is need to invest more in the Malakal Urban Water Supply Corporation which is old. The reservoirs were leaking as of the time of the case study. Burst pipes and leakages were not uncommon in Malakal town and when this happened, they created stagnant pools of water
- A huge sedimentation tank was constructed in 1984, but failed to function effectively as it got clogged up after a short while. Although a lot of money had been invested in that project, it was a perfect example of a design that was not sound in design. The huge tank needed to be decommissioned as a matter of urgency. It was also considered a physical hazard as it could collapse and hurt people who would happen to be nearby.

Case Study on Environmental Impacts of Small Scale Brick Making Activities

- The brick making site is situated along the River Nile. It commenced brick construction activities about 3 years ago. Brick making activities are only undertaken during the dry season which is about half a year.
- Due to the heightened level of construction activities in the town, brick making was a profitable enterprise employing quite a number of people and also giving good proceeds to the proprietor.
- Those skilled in brick making activities are from the Nuba Mts with only a few locals employed.
- Several borrow pits where clay had been extracted from were observed. The participants were informed that the pits fill on their own during the wet season when the Nile overflows and the water hyacinth together with silt just fill up the pits.

- There was a lot of wastage at the site caused by various reasons among them too much heat during the firing process and improper mixing of the soil. However, these wastes are quite useful for various activities such as making compound walls and construction of house foundation.
- It was procedural to add manure to the clay soils in order to improve the texture of the clay and avoid cracking. The manure was readily obtained from town at a cost of \$200.00 per lorry load. The participants felt that this activity deviates manure that would otherwise be used to improve soil quality for farming and lead to lower crop production yields. Since there was not much bricking making activities nor were people seriously engaged in farming activities, this was not considered a major risk as for now.
- Firewood for the firing process was obtained from about 10km away in Shilluk country. A lorry load costs \$450.00 which is quite lucrative. Increased brick making activities may degrade the land through deforestation considering that Malakal is a relatively dry place with a few scattered and stunted trees.
- Sanitation facilities were not available at the site and the workers use the bush to relieve themselves.
- Some women were providing catering services to the men involved in the brick making activities, which was an indirect benefit of the brick making activities.

Case Study on the Environmental Impacts of Agricultural Development Projects:

- The Malakal State Garden was established as a demonstration farm by the Ministry of Agriculture to help promote sound agricultural practices as well as equip young agricultural officers and others interested persons practical skills in the subject. The manner in which the activities were being done on the farm can therefore be said to be far much better than what the ordinary farmer does. It was a very good learning site.
- This is an integrated farm with a tree nursery, fish ponds, orchards and vegetable gardens. The farm can provide any assistance needed in starting off any of the four different activities.
- The farming operations use irrigation during the dry season and rain during the wet season. Production was noted to be higher during the wet season.
- Water wastage was observed in some sections of the farm. Water discharged from the cooling process of the engine pumping the water was flowing back to the Nile River. This was not considered the best way to handle that as it increased the chances of the oil getting into the river. There was no drain for the water which made the area around the point of discharge wet. This could lead to increased soil erosion too.
- Some of the environmentally sound practices observed were the creation of water catchments around the fruit trees and mulching which would reduce evaporation ultimately reducing the amount of water used.
- The soils in most of Upper Nile are very difficult to cultivate and so was the making of the beds. A lot of labour is therefore used.
- There was minimal use of pesticides on the farm. Pesticides were however occasionally used to kill pests that attacked the fruit trees. The farm's pesticides use and application methods and procedures need to be improved.
- The farm was gender sensitive and quite a number of the people preparing the vegetable beds were women. The groups also found a group of recently employed officers, mostly women under going an induction course.
- There was no significant oil spillage found around the engine for pumping the water, but the area was not well kept.

4. CONCLUSIONS, RECOMMENDATIONS AND WAY FORWARD

- The Malakal Municipal Authority or any other interested entrepreneur should put in place a recycling plant for water bottles as well as a mechanism for collecting them.
- Public Toilets should be provided within the town in strategic places. All households should also be encouraged and/or compelled to have latrines
- Awareness on the importance of latrines and proper disposal of human wastes should be created among the residents of Malakal and Upper Nile state.
- Management responsibility of public toilets/latrines should be assigned.
- The senior management in the Ministries and all the other organizations that had participated in the training should be made aware of the importance of environmental impact assessment and the need to provide a conducive environment for the trainees to apply and practice the acquired knowledge and skills.
- A sanitary land fill should be provided in Malakal.
- Senior public servants in Upper Nile state should also attend the EIA training workshops.
- Waste Management in the Malakal town should be improved.
- Participants should share the EIA message with their senior once they got back to their offices.

ANNEX I: COURSE EVALUATION

8TH ROUND STEP EIA COURSE EVALUATION SCORES COURSE HELD IN MALAKAL, UPPER NILE STATE FROM 10TH – 14TH MARCH 2008

ISSUE/ITEM	AVERAGE SCORE (1 is lowest, 5 is highest)
1. How would you assess the overall quality of the course content	4.6
2. The extent to which the Course improved the understanding of Environmental Assessment and Management.	4.7
3. The extent to which you now feel prepared to undertake or assist in the preparation of a Preliminary Assessment.	4.3
4. Course Scheduling and organization.	4.0
5. Course logistics and venue.	3.6
6. Content of participants source book.	4.7
7. Content of Environmental Guidelines for Small Scale activities.	4.4
8. Facilitation	4.4
Total Average score	4.4

COURSE EVALUATION COMMENTS – SAMPLE COMMENTS TO THE VARIOUS QUESTIONS

1. How would you assess the overall quality of the Course?
 - The course was so good to the extent that the importance of Environment Sound Design in development projects has been made so clear
 - -The Course covered the major issues that affect the environment in Upper Nile State and in Southern Sudan
 - Course content was excellent
2. The extent to which the course has improved your understanding of environmental assessment and management?
 - It has improved my understanding of EIA in general.
 - It has opened my eyes to see what needs to be done and put into consideration when designing project activities
 - The course was quite clear and will change the attitude of the participants towards the environment.

3. The extent to which you now feel prepared to undertake or assist in the preparation of a preliminary assessment?
 - Partially, I could assist in the preparation of a Preliminary Assessment.

4. Course Scheduling and Organization
 - Duration and time is adequate
 - The Scheduling was right ,but there is room for improvement in the organization

5. Course Logistics and Venue
 - Participants should have been provided with transport to and from the training venue
 - Course logistics was good but the venue was not made known to most of the participants.

6. Contents of Participants Source book
 - The source book is well designed and has all information in it
 - Very interesting materials

7. Contents of Environmental Guidelines for Small Scale Activities
 - The book will guide us for change.
 - The material is too big and it needs much more time to read and understand

8. Facilitation
 - Very good and systematic.
 - Very good Indeed.
 - Excellent and perfect in conducting lectures during the workshop.
 - They are very good but sometimes very first.
 - Well conducted and managed

ANNEX 2: AGENDA

AGENDA

USAID/SUDAN ENVIRONMENTAL CAPACITY BUILDING COURSE

VENUE: MALAKAL INTERNATIONAL HOTEL, MALAKAL TOWN 10TH – 14TH MARCH 2008

Time	Event or Model	Materials
<i>DAY 1: Introduction to Environmentally Sound Design</i>		
8:00 – 9:00	Arrival & Registration of Participants	Fiesta Warinwa to over see that
9:00 – 9:30	Opening Statements Welcoming Speech Official opening of the course	Jane Kahata – EIA Specialist & Course Coordinator, USAID/STEP Minister for Agriculture, Upper Nile State
9:30 – 10:30	Participants' introduction, solicitation of Group Goals and presentation of Course Objectives	Fiesta Warinwa & Jane Kahata
10:30 – 10:45	Tea Break	
10:45 – 12:45	(a) What is Environment?	Simon Gatheru
	(b) An Introduction to Environmentally Sound Design.	ESD Overhead (PPT 3596 KB) "Env. Sound Design (From new Draft) Small Scale Guidelines (PDF 349K) Jane Kahata
12:45 – 13:00	(d) Principals and practice of Environmentally Sound Design in key sectors (with opportunity for discussion of participants' experiences.	New draft Environmental Guidelines for Small Scale Activities (see resources pages) Fiesta Warinwa
13:00 – 14:00	Lunch	
14:00 – 16:00	Constructing a Historical Timeline for Upper Nile State	Briefing Session & Notes Fiesta Warinwa
16:00 – 16:15	Tea Break	
16:15 – 17:00	Basic Concepts for Assessing Environmental Impacts	EIA Basic Concepts Overheads (828 KB) by Simon Gatheru EIA Topic Briefing (Section 1) PDF 513K
17:00 – 17:15	Session on administrative issues/Logistics	Fiesta Warinwa
17:15 – 17:30	Facilitators Meeting	All Facilitators

Time	Event or Model	Materials
Day2 : In Introduction to USAID Environmental Screening Procedures		
8:30 – 10:30	5. An introduction to USAID, Nuba Mts & World Bank Screening Procedures	<u>Overheads</u> (PPT 318 KB) By Jane Kahata & Simon Gatheru
10:30 – 10:15	Tea Break	
10:15 – 11:00	Work Group exercise: Classifying activities using USAID Environmental Procedures Classifying Projects using Reg. 216)	EGSSAA: Chapter 6 Screening Activities By Simon Gatheru
11:00 – 12:00	Biophysical & Environmental Issues in Southern Sudan Sources of Information for EIA	Fiesta Warinwa
12:00 – 13:00	Information Requirements & Tools for Preliminary Assessment	By Jane Kahata
13:00 – 14:00	Lunch	
14:00 – 15:00	Presentation on the Socio economic and cultural issues in Upper Nile/Southern Sudan Sources of information for EIA	Fiesta Warinwa
15:00 – 16:00	Preparing a Preliminary Assessment Report	<u>Overheads</u> (PPT 328 KB) By Jane Kahata <u>EIA Topic Briefing Section 3</u> (PDF 513K)
16:00 – 16:15	Tea Break	
16:15 – 17:00	Introduction to Environmental Mitigation and Monitoring	<u>Mit & Mon Overheads</u> (PPT 1922K) <u>EIA Topic Briefing Section 4</u> (PDF 513K) By Simon Gatheru
17:00 – 17:20	Field case study briefings	By Jane Kahata
17:20 – 118:00	Facilitators' Meeting	All Facilitators

Time	Event or Model	Materials
DAY 3: Case Study Field Trips		
Departure 08:00	Field trips to case study sites – Working Groups of about 10 participants travel to separate sites, conduct initial assessments in the field.	All Facilitators
3:00 – 3:30	Briefing on how to prepare the Environmental Review/Preliminary Assessment Reports	By Simon Gatheru
3:30 – 6:00	Groups discuss and start preparing their Environmental Reviews Reports	All Facilitators
18:00 – 18:30	Facilitators' Meeting	All Facilitators
DAY 4: Producing Environmental Reviews and Monitoring and Evaluation Plans based on the Field trips		
08:00 – 12:00	Working Groups: Drafting Environmental Reviews for Case Studies (includes Coffee Break)	All Facilitators
12:00 – 13:00	Presentation and Discussion of Draft Environmental Assessment or Environmental Review Outlines	Moderated by Jane Kahata
13:00 – 14:00	Lunch	
14:00 – 16:00	Cont'd (Presentation and Discussion of Draft Environmental Reviews)	Moderated by Jane Kahata
16:00 – 16:15	Tea Break	
16:15 – 16:45	Environmental Mitigation and Monitoring: More on Issues and Methods	Mit & Mon Overheads (PPT 1922K) By Simon Gatheru EIA Topic Briefing Section 4 (PDF 513K)
16:45 – 17:30	Working Groups: Developing Plans for Monitoring and Mitigation for Case Studies	All Facilitators
18:00 – 18:30	Facilitators' Meeting	All Facilitators

Time	Event or Model	Materials
<i>DAY 5: Mitigation and Monitoring Plans, EIA Tools and Synthesis</i>		
08:30 – 12:00	Working Groups: Developing Plans for Monitoring and Mitigation for Case Studies Cont'd with tea break	
12:00 – 13:00	Presentation and Discussions of Draft Mitigation and Monitoring Plans	Moderated by Simon Gatheru
13:00 – 14:00	Lunch	
14:00 – 14:45	What if I have to go beyond the Preliminary Assessments	Overheads (PPT 270 KB) By Simon Gatheru
14:45 – 15:15	Special Topics: Environmental Impacts of Pesticides	Overheads (PPT 211 KB) By Jane Kahata
15:15 – 16:00	Course Evaluation, Synthesis and Recommendations for Follow-up Activities	Moderated by Fiesta Warinwa
16:00 – 16:15	Tea Break	
16:15 – 16:45	Presentation of Certificates & Closing	STEP Team Leader, Bruce Kernan
16:45 – 17:00	Facilitators available for individual consultations	All Facilitators

ANNEX 3: PARTICIPANTS LIST

PARTICIPANTS LIST TO THE EIA COURSE HELD IN MALAKAL, UPPER NILE STATE, SOUTHERN SUDAN

VENUE: MALAKAL INTERNATIONAL HOTEL, MALAKAL TOWN 10TH – 14TH MARCH 2008

NAME	ORGANISATION	POSITION DESIGNATION	TELEPHONE	EMAIL
Victor Yohannes Yon	Ministry of Agriculture	Malakal Jalap	+249913338609	
Paul Cyrilio Chan	Dept. of Environment and Tourism	D/Director Malakal	+249122494298	
Kim Peter Dak Kim	Ministry of Agriculture	A. Inspector	+2490121285430	
Joseph Okoth Pakwan	Department of Forest	D/Director Malakal	+2490121361299	
Stanislaus Obul Debar Long	Tear Fund/Orinyi/Kodok	Community Empowerment Supervisor	+2490915531159	
Peter Gaw	Food for the Hungry - Sudan	Food Security Officer	+249916435243; +8821650272751	pgaw@fhi.net /gawngundeng@yahoo.co.in
Chuol Diu	F.H.I -Sudan	Liaison Officer	+8821643333016	cdiu@fhi-net
John Oyec Lwong	Fashoda Youth Forum	Executive Director	'+249121763095; "+8821643333061	jolwong2000@yahoo.com
Andrew Paromi Ojowk	Department of Tourism	A/Tourism Officer	+2490951877151	
Yohannes Ajal Adol	Department of Tourism	Tourism Officer	+2490914642511	
Gatwech Thot Dei	Environ GoSS Offi Comm Deve Officer	A/Inspector Officer	+2490122444121	gthotdel@yahoo.com
Simon Pitia Wani	AAH – USA	Program Officer	+2490121704152	simon-pita@yahoo.com
Gabriel Yien Gach	AAH – USA	Food Security Logistic Officer	+2490121133781	gabnelyien@yahoo.com
Gailda Kwenda Gideon	AAH – USA	H/E Program Assistant	+2490129376164	claranjima@yahoo.com
Bol Puot Nyuot	ACF- USA	Community Nutrition Mobilizer	+2490129328700	bolnyuout@yahoo.com
Joseph Kihoro Mitugo	Fashoda Youth Forum	Coordinator	+249918427488	kihorob@hotmail.com
Elizabeth Nyakong Kut	AAH – USA	H/E Program Officer	+2490126065254	
Immanuel Wilson Thok	Ministry of physical Infrastructure	Engineer	+2490915982094	

NAME	ORGANISATION	POSITION DESIGNATION	TELEPHONE	EMAIL
Elshafai Awad Bakhit	Ministry of Physical Infrastructure	Engineer	+2490912689595	
John Olami Ojowk	Ministry of Infrastructure	Engineer	+2490913422495	
Viviana Obyeny George	Ministry of Health	Public Health Officer	+249091824348	
Sebit John Chol	Physical Infrastructure	Engineer	+2490915683393	
Joseph Chol Dak	Dept of Forestry			
Carlo Daniel Padiet	World Vision International	Malaria Project Officer	+249900023973	C/O adwera@wvi.org
Richard Opout Deng	World Vision International			C/O adwera@wvi.org
Yuosina Yousif Rafael	Ministry of Agriculture			
Facilitators				
Jane Kahata	IRG	EIA Specialist/Training Coordinator	+254 2 239807	jkahata@yahoo.com
Fiesta Warinwa	AWF	Coordinator Samburu Heartland	+254726380685	fwarinwa2000@yahoo.com
Simon Gatheru	National Museums of Kenya	Curator	+254 722883181	simongatheru@yahoo.com

U.S. Agency for International Development

1300 Pennsylvania Avenue, NW

Washington, DC 20523

Tel: (202) 712-0000

Fax: (202) 216-3524

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