

Regional Course on REDD+ MRV, NFI and Monitoring

11-15 July 2011

Sokoine University of Agriculture, Morogoro, Tanzania

Monday 11 July 2011

08.00 – 09.00	Logistics and Registration		
09.00 – 09.30	Introductions	Welcome to Sokoine University and Overview on the programme	Dr Emanuel J. Luoga
09.30 – 10.30	Where are we?	Tanzanian forests, forestry Forest inventory systems and the FAO/NAFORMA program	Dr Felician Kilahama Mr Nurdin Chamuya, Mr Soren Dalsgaard
10.30 – 11.00	Coffee		
Background and basics of REDD+. Theory and regional implementation			
11.00 – 12.00 <i>Section A</i>	Introduction to UN-REDD	Opening: UN-REDD and the role in preparing REDD+ Countries The UN-REDD Programme in Tanzania	Dr Peter Holmgren Mr Ralf Ernst
12.00 -13.00 <i>Section B</i>		What is REDD+, UNFCCC and IPCC	Dr Eliakimu Zahabu
13:00 – 14.00	Lunch		
14.00 – 14.30	REDD+ readiness in Tanzania	How is Tanzania “preparing for REDD+”: REDD+ Strategy:	Dr Eliakimu Zahabu, Mr Evarist Nashanda
14.30 – 15.00 <i>Section C</i>	Introduction to the Training Course	Background, Issues and why a course program	Dr Tomas Thuresson
15.00 – 15.30		”MRV and Monitoring for REDD+” (incl. safeguards)	Dr Tomas Thuresson
15.30 – 16.00	Coffee		
16.00 – 17.00	MRV	The M, R and V in MRV (Incl. Tiers and IPCC guidelines)	Dr Lutz Fehrmann

TOPICS COVERED:

“MRV and Monitoring for REDD+”: Background, Issues and Why a course program

What is REDD+ - Sections A and B

- REDD+ why, where and how?
- UNFCCC, REDD+ under convention and IPCC
- Discussion – implications

REDD+ MRV and Monitoring – Section C

- What to Measure and monitor
- How to Report
- IPCC Guidelines and Tiers
- What is needed for REDD+?
- Carbon consequences of Deforestation, Degradation and +
- IPCC, FRA and other definitions – what to use, when and why?
- Definitions and implications on decision making

Tuesday 12 July 2011

08.00 – 8.30	Registration		
08.30 – 9.00 <i>Section D</i>	Monitoring	“The capacity gap between desired reporting and current situation”: Massive Capacity Building needed	Dr David Morales
09.00 – 09.30		What do we mean by “Monitoring”	Dr David Morales
09.30 – 10.30		Approach and how do we Measure in Tanzania – the ‘M’	Dr Rogers Malimbwi, Mr Jared Otieno
10.30 – 11.00	Coffee		
11.00 – 11.20 <i>Section F</i>	Statistics	What does IPCC say about statistics	Dr Lutz Fehrmann
11.20 – 12.00		Basic forest statistics – Accuracy and Bias	Dr Lutz Fehrmann
12.00 – 13.00		Basic forest statistics: Precision and Sources of Errors in Biomass Estimations	Dr Lutz Fehrmann
13.00 – 14.00	Lunch		
14.00 – 14.45	Information needs and decisions	Precision and change estimates – why is precision important when we estimate change	Dr Lutz Fehrmann
14.45 – 15.30 <i>Section G</i>		REDD+ Decisions – Strategic vs Operational decision needs	Dr Tomas Thuresson
15.30 – 16.00	Coffee		
16.00 – 17.00	Forest Inventory	Measurements on the ground is the key. RS alone is not enough Combined estimates RS and ground measurements The Tanzanian approach	Dr Erkki Tomppo

TOPICS COVERED:

“The capacity gap between desired reporting and current situation”: Massive Capacity Building needed!

Monitoring – Section D

Forest statistics – Section E

- Is a change a change or can there be change where we can't see any change?
- Different error sources in estimating biomass and biomass changes. Total error budget. Background: remote sensing is often over-sold particularly in Tropical countries. In many cases, the error components, even the most significant error components, are neckleted omitted in the promises. State estimates v.s.change estimates
- Implications on costs, organisation, techniques, competences, etc.

Information needs – Section F

- Is a change a change or can there be change where we can't see any change?
- State estimates v.s.change estimates
- Implications on costs, organisation, techniques, competences, etc.
- REDD+ only one decision component
- Other decisions about the use of forests and other land
- Strategic decisions – strategic data needs
- Operational decisions – operational data needs

Forest inventories for decision making – Section G

- Forest monitoring and sample design for different needs
- Will RS do it?
- Will massive measurements in forests be necessary?
- Different situations render different monitoring

Wednesday 13 July 2011

08.00	Assembling at departure point
08.00 – 16.00	Field visit - Tanzanian organization
16.00 – 19.00	Return Trip to Morogoro

Topics covered:

- Field work
- Discussions on allometrics, crown closure, variables to collect, etc.

Thursday 14 July 2011

08.30 – 09.00 <i>Section I-J</i>		Organizing a national monitoring centre – from data to information	Dr Tomas Thuresson
09.00 – 09.30		Work going on in Tanzania	Mr Gerald Kamwenda
09.30 – 10.30		Budget, staff, experts, training, mobilization, Quality Assurance	Mr Soren Dalsgaard
10.30 – 11.00	Coffee		
11.00 – 11.30		Monitoring for drivers of LUC	Mr Mikko Leppänen
11.30 – 12.00		The Tanzanian example	Mr Evarist Nashanda
12.00 – 13.00		Drivers of land use change and policy options analyses	Dr Tomas Thuresson
13.00 – 14.00	Lunch		
14.00 - 14.30		Some results from NAFORMA - Experiences - Data from forests	Dr Erkki Tomppo
14.30 – 15.00		Closing session – Summing up the executive part of the course	Mr Mikko Leppänen
15.00-15.30		Coffee	
15.30 – 15.45 <i>NAFORMA Deep</i>		Introduction to the NFI managers part of the course	Mr Mikko Leppänen
15.45 – 16.30		Planning and implementation of NAFORMA	Mr Nurdin Chamuya
16.30 – 17.30 <i>NAFORMA Deep</i>		Soil sampling	Dr Abel Kaaya

Topics covered:

"Measurements and Monitoring for decision making" – Who are the decision makers and what data and information do they need apart from REDD+?

Base lines and Drivers of land use change – Section I-J

- Information for causes of LUC
- Examples from reality
- Database management
- Data – Information - Decisions
- Implications of costs, organization, techniques, competences, etc.
- The information needs for decisions depends on the decisions to be made
- Case work – how do we start the readiness work in a low-tech country without an ongoing NFI

Friday 15 July 2011

08.30 – 09.00		Database and Information systems	Ms Amina Akida
09.00 – 09.30		Calculations and analysis of the data	Dr Erkki Tomppo
09.30 – 10.30		LULC Mapping	Mr Elikana John, Dr Boniface Mbilinyi
10.30 – 11.00	Coffee		
11.00 – 11.30 <i>NAFORMA Deep</i>		Mapping, small area estimation and RS tools (monitoring and mapping) in NAFORMA	Dr Erkki Tomppo
11.30 – 12.00		Quality Assurance	Dr Rogers Malimbwi
12.00 – 13.00		End discussion and words	Mr Mikko Leppänen, Dr Emmanuel Luoga
13.00 – 14.00	Lunch		
14.00	Departure		

Suggested Literature

Section B

UNFCC REDD+ www.un-redd.org/Newsletter13/2_New_Countries/tabid/6385/Default.aspx

Section C

GOFC-GOLD Sourcebook 2:42-48 <http://www.gofc-gold.uni-jena.de/redd>

Section F

GOFC-GOLD Sourcebook pp 2-100:108 <http://www.gofc-gold.uni-jena.de/redd>

Section G

Forest inventories generate scientifically sound information on the forest resource: but do our data and information really matter? Discussion paper by Christoph Kleinn¹ and Göran Ståhl²
http://intranet.catie.ac.cr/intranet/posgrado/InvestCienciaGestionConocimiento/Bryan%20Finegan/Kleinn_Stahl%202006.pdf

Section I

- **Article on baselines in Guyana**
www.redd-monitor.org/2011/01/27/increasing-deforestation-in-guyana-gives-norway-a-headache/
- **Chapter 6 in Moving Ahead with REDD**
www.cifor.cgiar.org/nc/online-library/browse/view-publication/publication/2601.html
- **Field Manual – Bio-physical Survey - National Forestry Resources Monitoring and Assessment of Tanzania**
- **Field Manual – Social Economic Survey – National Forestry Resources Monitoring and Assessment of Tanzania**
http://www.unredd.net/index.php?option=com_docman&task=doc_view&gid=4637&tmpl=component&format=raw&Itemid=53
- **Sampling Study - National Forestry Resources Monitoring and Assessment of Tanzania**

Section J

- **Information Systems Theory**
http://www.unredd.net/index.php?option=com_docman&task=doc_view&gid=4633&tmpl=component&format=raw&Itemid=53
- **Policy Options to reduce deforestation, A. Angelsen**
http://www.unredd.net/index.php?option=com_docman&task=doc_view&gid=4636&tmpl=component&format=raw&Itemid=53
- **GOFC-GOLD Sourcebook pp 3-163:184** <http://www.gofc-gold.uni-jena.de/redd>