

**Agreement between the Government of the United Republic of
Tanzania and the Norwegian Ministry of Foreign Affairs
regarding development cooperation concerning:**

***Enhancing the measuring, reporting and verification (MRV) of
forests in Tanzania through the application of advanced remote
sensing techniques”***

The Government of the United Republic of Tanzania (Tanzania) and the Government of the Kingdom of Norway (Norway) have entered into an agreement regarding “Cooperation for Promotion of Economic and Social Development of the United Republic of Tanzania”, dated 13 June 1988 and prolonged by Addenda of which the latest is dated 1st of November 2007 (the Main Agreement).

WHEREAS Tanzania in letter dated 14th March 2011 has requested Norway for support to “Enhancing the measuring, reporting and verification (MRV) of forests in Tanzania through the application of advanced remote sensing techniques” and

WHEREAS the Norwegian Ministry of Foreign Affairs (MFA) has decided to comply with the request,

NOW THEREFORE MFA and Tanzania (the Parties) have reached the following understanding which shall constitute an Agreement between the Parties:

**Article I
Scope and objectives**

1. This Agreement sets forth the terms and procedures for MFA’s support to “Enhancing the measuring, reporting and verification (MRV) of forests in Tanzania through the application of advanced remote sensing techniques”, (the Project) as outlined in the Agreed Project Summary in Annex I and further described in the Project Document “Enhancing the measuring, reporting and verification (MRV) of forests in Tanzania through the application of advanced remote sensing techniques”, dated 8th March 2011.
2. The Goal of the Project is: “Tanzania effectively monitors forest and carbon data for use domestically and for reporting to the global level” . The purpose of the project is to “design and develop efficient methodologies for MRV that utilise a combination of ground data and remote sensing techniques, and to enable GoT to benefit from these techniques as part of their MRV system for REDD”.
3. The Parties may agree on extending existing or including new Project elements within the Project, as well as on re-allocating funds within the Project. Any such agreement shall be in writing, e.g. recorded in the Agreed Minutes from the consultations mentioned in Article VI.

**Article II
Cooperation – Representation**

1. The Parties shall communicate and cooperate fully with the aim to ensure that the Goal and Objectives are successfully achieved. The Parties further agree to cooperate on preventing corruption within and through the Project, and undertake



to take rapid legal action to stop, investigate and prosecute in accordance with applicable law any person suspected of misuse of resources or corruption. The Parties shall immediately inform each other of any indication of corruption or misuse of resources related to the Project.

2. In matters pertaining to the implementation of the Project the Norwegian Embassy in Dar es Salaam (the Embassy) and the Tanzanian Ministry of Finance (MoF) shall be competent to represent MFA and Tanzania respectively. All communication regarding the Agreement shall be directed to the Embassy.
3. The Ministry of Education and Vocational Training (MoEVT) in Tanzania shall through Sokoine University of Agriculture (SUA) be responsible for day-to day implementation of the Project.

Article III Contribution of MFA

1. MFA shall, subject to Parliamentary appropriations, make available to Tanzania a financial grant not exceeding NOK 27 532 200 (Norwegian kroner twenty seven million five hundred and thirty two thousands two hundred) (the Grant) to be used exclusively to finance the Project in the planned period 1st May 2011-30th June 2014.
2. Any accrued interests on the Grant may be used for the benefit of the Project if agreed in advance by the Parties in writing.
3. In order to ensure high quality accounting of the Project, MFA shall from time to time on MFA's initiative make available to the SUA and any partner subcontracted by them external financial management advisory services, including technical advice and relevant training. The cost of such services will be covered by MFA over and above the Grant.
4. Any unspent disbursed funds and accrued interests shall be returned to MFA upon completion of the Project.

Article IV Contributions and obligations of Tanzania

Tanzania shall be responsible for implementing the Project, and shall hereunder:

1. Have the overall responsibility for the planning, implementation, reporting and monitoring of the Project.
2. Provide the financial and other resources required in addition to the Grant.
3. Ensure that the Grant is used according to approved work plans and budgets.
4. Ensure that Project funds, which shall include any accrued interests, are properly accounted for, and that the Grant is reflected in the plans, budgets and accounting of Tanzania.



5. Promptly inform MFA of any circumstances that interfere or threaten to interfere with the successful implementation of the Project.
6. Undertake the obligations set out in the Main Agreement with regard to technical assistance personnel and contractors provided by Norway.
7. Exempt any customs duties, taxes and fees on all equipment, materials and supplies financed by the Grant and imported into Tanzania for the benefit of the Project
8. Ensure that all permits, import licenses and foreign exchange permissions that may be required are granted.
9. Ensure that representatives of Norway are permitted to visit any part of Tanzania and examine any relevant records, goods and documents for purposes related to the Agreement.
10. Ensure that SUA enters into contracts with cooperating institutions, and submits copies of these contracts to MFA for information.
11. Cooperate fully with external financial management advisor(s) made available by MFA pursuant to Article III paragraph 3
12. Ensure that subcontracted partners are obliged, through relevant clauses in their contracts, to supply annual certified financial statements to SUA and to cooperate fully with the external financial management advisor(s) (mentioned in Article IV, paragraph 11)

Article V Disbursements

1. The Grant will be disbursed upon semi-annual written requests from Tanzania based on the financial needs of the Project and, except the first request, on approved work plans and budgets. The first disbursement, amounting to NOK 11 251 800 will be made upon signing of this Agreement and approval by MFA of a disbursement request from Tanzania.
2. When determining the amount to request, Tanzania shall take into account unspent disbursed amounts and income from all sources as well as any accrued interests which the Parties have agreed on using for the benefit of the Project according to Article III, Clause 2.

Along with the requests, except the first request, Tanzania shall submit statements of cash and bank balances from the Project's accounting records.

3. Funds will be transferred to the Exchequer Development Account upon MFA's approval of the requests. From that account funds will be released through the MoEVT to a separate and convertible bank account. The funds shall thereafter be available to the Project immediately through SUA.

Tanzania shall immediately, in writing, acknowledge receipt of the funds. The date of receipt shall be stated as well as the exchange rate applied.

SUA shall accordingly open and operate a separate and convertible bank account for the Project funds.



4. All disbursements to suppliers of goods or services shall be made by Tanzania.

Article VI Annual Meeting

1. Representatives of the Parties shall have an Annual Meeting tentatively during the second quarter of each calendar year in order to:
 - Discuss the progress of the Project, including results and fulfillment of agreed obligations,
 - discuss and, if feasible, approve annual work plans and budgets for the following year,
 - discuss issues of special concern for the implementation of the Project, such as the major risk factors set out in the Agreed Project Summary in Annex 1, and how to manage such risks/issues.
2. The documentation specified in Articles VII and IX shall form the basis for the consultations.
3. The Annual Meeting shall be called and chaired by SUA.
4. The main issues discussed and points of view expressed as well as any decisions shall be recorded in Agreed Minutes. The Agreed Minutes shall be drafted by SUA and be submitted to MFA for comments no later than two weeks after the Annual Meeting. The final Agreed Minutes shall be signed by both MFA and MoEVT no later than one month after the Annual Meeting.

Each of the Parties may include others to participate as observers or as advisors to their delegations.

Article VII Reports

1. Tanzania shall submit to MFA the reports and documentation specified below. MFA shall acknowledge receipt within three weeks upon receipt of the reports and documentation.
2. An annual progress report shall be submitted to MFA four weeks before the Annual Meeting each year.

The progress report shall be prepared in an agreed format (see Annex II) and shall include, but not be limited to, the following information:

- A description of actual outputs compared to planned outputs (as defined in the work plans),
- a brief summary of the use of funds and inputs compared to budget,
- an assessment of the efficiency of the Project (how efficiently resources/inputs are converted into outputs),
- an explanation of major deviations from plans,
- an assessment of problems and risks (internal or external to the Project) that may affect the success of the Project,
- an assessment of the need for adjustments to activity plans and/or inputs and outputs, including actions for risk mitigation,



- a brief assessment of achievements in relation to Purpose,
3. An annual work plan shall be submitted four weeks before the Annual Meeting, *The work plan shall specify planned outputs and time schedules for the next fiscal year.*
 4. The following annual financial statements and budget shall be submitted four weeks before the Annual Meeting.

a) Annual financial statement consisting of:

- A statement showing income and expenditures for the previous period structured as and compared to approved budgets for such previous period. The statement shall capture all sources of funding, with sufficient segregation of data to permit identification of individual sources of funds and disbursements on major Project activities or types of expenditure,
- A statement and a clear breakdown of cash and bank balances,
- Relevant notes to the above mentioned statements including a description of the accounting policies used and any other explanatory material necessary for transparent financial reporting of the Project.

b) Budget for the Project for the coming project year showing estimated income from all sources and planned expenditures (in format comparable to the financial statements).

The financial statements and budget(s) shall give complete and detailed information on the financing of the Programme.

5. In addition to the annual progress report, Tanzania shall submit to MFA information material including policy briefs and other popular reports produced within the Project.
6. A final report shall be submitted within six months after the completion of the Project. If the Project is not completed by the agreed date, a status report shall be submitted to MFA by the said date.

The final report shall include, but not be limited to:

- The topics listed in clause 2 above for the whole Agreement period,
- an assessment of the effectiveness of the Project, i.e. the extent to which the Purpose has been achieved,
- an assessment of impact, i.e. the changes and effects positive or negative, planned and unforeseen of the Project seen in relation to target groups and others who are affected,
- an assessment of sustainability of the Project, i.e. an assessment of the extent to which the positive effects of the Project will still continue after the external assistance has been concluded,
- a summary of main “lessons learned”.



Article VIII Procurement

1. Tanzania undertakes to effect all procurements of goods and services necessary for the implementation of the Project.
2. The procurements shall be performed in accordance with generally accepted procurement principles, good procurement practices, the procurement laws and regulations of Tanzania. Norwegian suppliers shall be given the same opportunities as other suppliers to compete for deliveries.

Tanzania shall observe the highest ethic standards during the procurement and execution of contracts, and shall ensure in its national legislation adequate and effective means to punish and prevent illegal or corrupt practices.

No offer, gift, payment or benefit of any kind, which would or could, either directly or indirectly, be construed as an illegal or corrupt practice, e.g. as an inducement or reward for the award or execution of procurement contracts, shall be accepted. Invitations to make offers as well as the procurement contracts shall, respectively, include a clause stating that the offer will be rejected and/or the contract cancelled in case any illegal or corrupt practices have taken place in connection with the award or the execution of the contract.

3. Tanzania shall upon request furnish MFA with all relevant information on its procurement practices and actions taken, and provide access to all related records and documents. MFA may require access to information even during the stage in the procurement procedure when it is restricted to the officers performing the procurement. Restrictions on such information shall be respected until the information can be made public without any risk of detriment to the result of the procurement.

Article IX Audit

1. The annual financial statements of the Project shall be audited by the Tanzanian Controller and Auditor General or an equivalent governmental audit body or an independent professional accountant/accountancy firm in public practice (external auditor/ audit firm) engaged by the Controller and Auditor General.

The cost of the audit shall be covered by the Grant.

2. The audit shall be carried out in accordance with international auditing standards. The auditor shall state in the report which auditing standards that have been applied.
3. The audit report shall state the auditor's opinion/findings as to:
 - Whether the financial statements and the cash/bank/financial position present fairly, in all material respects, the income and expenditures of the Project in accordance with an acceptable financial reporting framework.
 - Whether the audit has uncovered any material weaknesses in relevant internal control(s).
 - Whether the funds have been deposited in a separate bank account in the name of the organisation and that accrued interest are reflected in the statement from the bank.
 - Whether the audit has uncovered any illegal or corrupt practices.
 - Whether receipts/income and expenditures are properly accounted for.



- Whether the financial statements are in accordance with the records and books of accounts maintained by the Project.
 - Whether the expenditure incurred by the Project is properly documented and is in line with the budget.
 - Whether the internal control system exists and is working efficiently to identify possible fraud or material misstatement.
 - Whether the expenditures for each activity as per the activity budget are traceable and report on the variance in line with the budget.
 - Whether the auditor has obtained all the information and explanation necessary for the purpose of the audit.
4. Tanzania shall submit to MFA the audit report and any other report from the auditor significant to the implementation of the Project before 1st April following the end of the Tanzanian fiscal year. Tanzania shall comment upon the auditor's findings. MFA shall respond within four weeks upon reception of the report.

Article X

Reviews – Evaluation

1. A mid-term review focusing on progress to date and the effectiveness of the Project, i.e. the extent to which the purpose is being/has been achieved, shall be carried out by second quarter of fiscal year 2012. An assessment of the Project's outcomes may also be included in the review.

An end review shall be done shortly after the completion of the activities of the Project. The purpose should be to assess to what extent the Project has fulfilled its objectives and contributed towards its goal, as well as document the experience gained and learning elements.

2. The cost of the reviews shall be covered by the Grant, and administered by MFA.
3. Norway reserves the right to carry out independent reviews or evaluations of the Project as and when MFA deems it necessary. The cost for such reviews will be covered by funds over and above the Grant.

Article XI

Reservations

1. MFA reserves the right to withhold disbursements at any time in case e.g.:
- The Project develops unfavorably in relation to the Goal and Purpose,
 - substantial deviations from agreed plans or budgets occur,
 - resources to be allocated by Tanzania are not provided as agreed,
 - the documentation specified in Articles VII and IX has not been submitted as agreed,
 - the financial management of the Project has not been satisfactory,
 - the contracts referred to in Article IV, Clause 10 are breached or terminated before all obligations therein are fulfilled.
2. MFA reserves the right to reclaim all or parts of the Grant and cancel the Agreement if Project funds are found not to have been used in accordance with the Agreement or are found not to be satisfactorily accounted for.
3. MFA has the right to cancel the Agreement or portion of the Agreement, and has the right to demand the cancellation of any contract financed under the Agreement, with immediate effect if it determines that corrupt or fraudulent

practices were engaged in by representatives of Tanzania or by a beneficiary of Project funds during procurement or execution of the contract without Tanzania having taken timely and appropriate action satisfactory to MFA to remedy the situation.

4. Before MFA withholds disbursements, reclaims funds or cancels the Agreement, the Parties shall consult with a view to reaching a solution in the matter.

Article XII
Distribution of the Agreement

The Parties shall distribute copies of the Agreement to the respective ministries, authorities and other institutions involved in the Project or otherwise in need of information on its content.

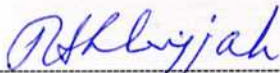
Article XIII
Entry into force – Termination – Disputes

1. The Agreement shall enter into force on the date of its signature, and shall remain in force until the Parties have fulfilled all obligations arising from it. Whether the obligations are fulfilled, shall be determined in consultations by the Parties.
2. Notwithstanding the previous clause each Party may terminate the Agreement upon three months written notice.
3. If any dispute arises relating to the implementation or interpretation of the Agreement, the Parties shall consult with a view to reaching a solution.

IN WITNESS WHEREOF the undersigned, acting on behalf of their respective Party, have signed the Agreement in two originals in the English language.

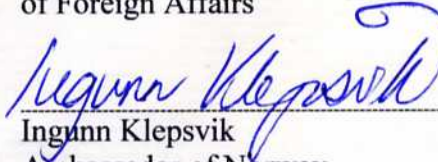
Done in Dar es Salaam, the ^{25th} day of June of 2011.

For the Government of
the United Republic of Tanzania



Ramadhani M. Khijjah
The Permanent Secretary
Ministry of Finance

For the Norwegian Ministry
of Foreign Affairs



Ingunn Klepsvik
Ambassador of Norway

Annex I
Agreed Project Summary

Identification of the Programme:

Project Title: “*Enhancing the measuring, reporting and verification (MRV) of forests in Tanzania through the application of advanced remote sensing techniques*”.

- ***Implementing institution:*** Sokoine University of Agriculture, Tanzania.
- ***Partner institutions:*** Kongsberg Satellite Services (KSAT), Northern Research Institute, Tromsø (Norut), Norwegian Computing Centre (NR), Norwegian Forest and Landscape Institute (NFLI), Norwegian University of Life Sciences (UMB, University of Dar Es Salaam (UDSM), University of Tromsø (UoT).

Description of the Project:

Goal. Tanzania effectively monitors forest and carbon data for use domestically and for reporting to the global level

Purpose: Efficient methods for MRV utilizing a combination of ground data and remote sensing techniques is developed/designed, enabling GoT to benefit from these techniques as part of their MRV system for REDD

Project objectives:

- 1 Test and document the accuracy of airborne LiDAR measurements for biomass and carbon stock estimation in tropical rain forests with high biomass density.
- 2 Develop, implement, test and validate a statistically sound sampling-based application for regional biomass/carbon stock change estimation utilizing a combination of ground samples and samples (strips) of airborne LiDAR data collected over NAFORMA ground plots across a selected district of Tanzania.
- 3 Deliver pre-processed optical and SAR (Synthetic Aperture Radar) data for forest monitoring and develop an automated chain for pre-processing.
- 4 Develop and test methods to monitor changes in forest areas based on the use of satellite data.
- 5 Estimate above-ground biomass for different forest types, based on different combinations of satellite data and including different processing methods.
- 6 Develop allometric models for total above-ground and below-ground biomass for selected vegetation types in Tanzania for improved biomass and carbon stock estimation.



The main *outputs, activities* and *indicators* are shown below:

OUTPUTS/ACTIVITIES	Objectively verifiable indicators
<p>1. Testing of airborne LiDAR for biomass estimation in high biomass forests in Tanzania</p> <p>1.1 Design of project, including planning of data acquisition and specification of LiDAR data collection</p> <p>1.2 Preparation of tender documents, hiring LiDAR data vendor</p> <p>1.3 LiDAR data acquisition (80km², wall-to-wall with 5points/m²)</p> <p>1.4 Pre-processing by data vendor. Data delivery.</p> <p>1.5 Collection of additional ground data and georeferencing of the ground plots to strengthen the field data collection by SUA in the Amani Nature Reserve.</p> <p>1.6 Processing of field (SUA) and LiDAR (UMB) data</p> <p>1.7 Estimation and analysis</p> <p>1.8 Preparation of biomass- and LiDAR data for use in testing and validation in other WP's. Export of data. Delivery of LiDAR data and associated estimates of biomass and other variables to relevant national authorities as deemed relevant</p> <p>1.9 Documentation and publication activities. Reporting</p>	<p>Plan showing LiDAR flight specifications (sensor requirements, flight mission setup) Specification of the LiDAR campaign</p> <p>Collected LiDAR data of 80 km² forest</p> <p>Data delivered</p> <p>Field instructions and work plans</p> <p>Data summaries</p> <p>Biomass estimates in high density forests</p> <p>Data summaries at pixel level – LiDAR observables and biomass</p> <p>Graduation of a PhD student in LiDAR remote sensing.</p> <p>Scientific documentation. Costs compared to budget and Progress compared to time schedule/targets</p>

<p>2. A regional sample survey for estimation of changes in biomass based on airborne LiDAR samples (strips) and NAFORMA ground data</p> <p>2.1 Design of project. Planning of data acquisition</p> <p>2.2 Dialog with NAFORMA- exchange of information (specifications of NAFORMA, location of field plots and other technical aspects that need consideration in planning)</p> <p>2.3 Preparation of tender documents</p> <p>2.4 LiDAR data acquisition and pre-processing by vendor. Data delivery</p> <p>2.5 Acquisition of NAFORMA data for analysis (SUA). Acquisition of relevant land cover data from other WPs for stratification purposes (UMB). Re-measurement of NAFORMA filed plots</p> <p>2.6 Adjustment and further development of statistical estimators for two-stage/two-phase design</p> <p>2.7 Application and further development of statistical estimators for two-stage/ two-phase design</p> <p>2.8 LiDAR- and field data processing</p> <p>2.9 Estimation and analysis, comparison with NAFORMA estimates, efficiency assessment</p> <p>2.10 Data preparation for export and distribution to project partners and Tanzanian authorities.</p> <p>2.11 Documentation and publication. Reporting</p>	<p>Plan showing LiDAR flight specifications (sensor requirements, flight mission setup)</p> <p>Data delivery</p> <p>Specification of the LiDAR campaign</p> <p>Data delivered</p> <p>Data delivered</p> <p>Data delivered</p> <p>Statistical estimators (equations)</p> <p>Computer algorithms</p> <p>Data summaries</p> <p>Estimates and accuracy estimates of biomass at national level by LiDAR, ground plots and satellite data</p> <p>Digital datasets</p> <p>Same as for WPI, 1.9</p>
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<p>3. Delivery of preprocessed satellite data and development of preprocessing methods</p> <p>3.1 Identify 10 test areas (each area s be covered by one Landsat scenes and one SAR scenes - SAR sensor TBD). The test areas should be representative for different Tanzanian forest types/biomes</p> <p>3.2 Develop and test methods for (semi-) automatic atmospheric correction of high resolution optical images (Landsat). Test if moderate to low resolution images (e. g., MODIS, MERIS, AVHRR) can help to improve the atmospheric correction of Landsat images.</p> <p>3.3 Develop and test methods for cloud and cloud shadow detection and masking in high resolution optical images (e. g., Landsat, Sentinel-2)</p> <p>3.4 Investigate how the methods used in MIR (Multiple Image Registration) can be integrated with terrain height correction in an automatic processing chain.</p> <p>3.5 Test available laboratory versus commercially available methods for SAR preprocessing, and demonstrate the potential for use in KSAT's production line.</p> <p>3.6 Demonstrate preprocessing methods for optical Landsat images for use in KSAT's production line</p> <p>3.7 Preprocess national Landsat and SAR coverage of Tanzania from the 2009/2010 geo fct acquisitions</p>	<p>Satellite images are processed automatically</p> <p>Images are co-registered with sub pixel accuracy</p> <p>Clouds are properly masked in optical images</p> <p>Reduced or eliminated atmospheric disturbance in optical images</p> <p>Execution time of automatic preprocessing</p> <p>Costs compared to budget and Progress compared to time schedule/targets</p>
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4. Mapping of forest area and forest area change

4.1 Identify representative polygons of each different forest type/ biome in Tanzania, as well as other major land cover classes: Also with areas with known changes

4.2 Investigate and interpret the variability of optical ground cover reflectance and microwave characterization within and between geographically separated forest biomes and land cover classes of Tanzania, also by considering phenology from dry/wet seasons.

4.3 Develop and test methods for automatic change detection from time series of optical high resolution images (Landsat)

4.4 Develop and test methods for automatic change detection from time series of SAR images.

4.5 Develop and test methods for automatic change detection from time series of Landsat and SAR images, and compare with the single sensor approaches above.

4.6 Develop and test methods for producing single-date products from time series analysis, including minimum cloud cover mosaics, land cover classification, forest/non-forest map, percent tree cover

4.7 Evaluate forest products (change detection maps and single date products) from the different methods: Landsat, SAR and multi-sensor Landsat+SAR, multiresolution Landsat+MODIS

4.8 Analyze the challenges detected in the evaluation, and refine the methods

4.9 Demonstrate production of forest change maps for Tanzania, and demonstrate production of annual (also called single date) products for Tanzania: minimum cloud cover Landsat mosaic, land cover map, forest/ non-forest map, and percent tree cover.

Optical and microwave characteristics are established

Performance of the various change detection methods on initial 10 test images

Correct classification rates on land/forest cover maps

UDSM is able to produce forest change maps and land/forest cover maps. Costs compared to budget and Progress compared to time schedule/targets

5 Biomass estimation methods for satellite data

5.1 Test the capability of using InSAR and PolSAR methodology to measure biomass, in particular InSAR in high biomass forest and PolSAR where vegetation is lower

5.2 Demonstrate how changes in biomass from 2000 up till today can be estimated using a combination of SRTM (Shuttle Radar Topographic Mission) DEM (Digital Elevation Model) and satellite based InSAR DEM from Cosmo Skymed or Tandem-X

5.3 Develop forest type classification used as input to stratified biomass estimation by proxy

5.4 Integration of statistical SAR parameters in biomass estimation

Biomass estimation with high accuracy and no saturation

Methods for forest degradation

Obtained results independent of cloud cover

Costs compared to budget and Progress compared to time schedule/targets

<p>6. Develop allometric biomass estimation models in selected vegetation types of Tanzania</p> <p>6.1 Field data collection for the miombo woodland for model development</p> <p>6.2 Field data collection for the montane and lowland forests for model development</p> <p>6.3 Laboratory work, Data analysis and report writing</p>	<p>Biomass and stem volume equations for miombo woodlands, montane forests, and lowland forests in place</p> <p>PhD and MSc qualified/graduated</p> <p>Costs compared to budget and Progress compared to time schedule/targets</p>
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Major *risk factors* (internal and external)

1. Uncertainty related to the availability of satellite data since one or more of the intended satellites may fail,
2. Uncertainty related to the availability of airborne LiDAR data since difficult weather conditions may delay or hamper data acquisition,
3. Uncertainty related to availability and quality of NAFORMA field data since the NAFORMA field data collection may be delayed for various reasons and quality (accuracy) may be lower than anticipated in the plans for the program due to problems faced during field implementation,
4. The professional implementation and success of each work package and the usefulness/validity of their results in MRV,
5. Uncertainty related to the project's linkages to and integration with other ongoing activities in Tanzania like NAFORMA, UNREDD, NMC/NCAS-T, NGOs and with GEO FCT during the project period,
6. The creation of a functioning MRV/NCAS system that utilizes the results of the project in future MRV of tropical forest in Tanzania, both on a national scale and in hot-spots,
7. The successful use of an MRV/NCAS system in international reporting and to reduce deforestation in Tanzania.
8. Risks related to implementing a complex programme with many partners

Budget

Work Package (in kNOK)	2011	2012	2013	2014	Total
Work package 1: Testing of airborne LiDAR for biomass estimation in high biomass forests					
Total	2570	2350	10		4930
Work package 2: A regional sample survey for estimation of changes in biomass based on airborne LiDAR samples (strips) and NAFORMA ground data					
Total	3140	1400	3940	1110	9590
Work Package 3: Delivery of preprocessed satellite data and development of preprocessing methods					
Total	1945	840			2785
Work Package 4: Time series analysis for satellite data					
Total	855	3185	1670	855	6565
Work Package 5: Biomass estimation methods for satellite data					
Total	182.2	1188.3	944.5		2315
Work Package 6: Develop biomass estimation models in selected vegetation types of Tanzania					
Total	195	125	80		400
Work package 7: Project Management					
Total	139.8	515.8	110.8	180.8	947.2
Total	9027.0	9604.1	6755.3	2145.8	27532.2

Tentative disbursement scheme

Annual disbursement (calendar year)	NOK
2011	9027000
2012	9 604100
2013	6 755300
2014	2145800
TOTAL	27 532 200



Annex II Format for progress reports

Project name:

Reporting period:

Completed by:

1. Project performance during reporting period

a. Technical

(description of actual outputs compared to planned outputs, as defined in quarterly work plans and Project monitoring indicators)

b. Financial

(a brief summary of the use of funds compared to budget, explanations of variance, and an outline of any additional funds secured for similar or related activities)

2. Project impacts of Project to date

(a brief assessment of the extent to which the purpose has been achieved according to Project monitoring indicators and milestones)

(final report only: an assessment of impact, i.e. the changes and effects positive or negative, planned and unforeseen of the Project seen in relation to target groups and others who are affected)

3. Adaptive management

a. Constraints and opportunities during reporting period

(an explanation of major deviations from the plan)

b. Future risk and opportunity assessment

(an assessment of problems and risks (internal or external to the Project) that may affect success, as well as opportunities)

c. Project response

(an assessment of the need for adjustments to activity plans and/or inputs and outputs, including actions for risk mitigation)

4. Way forward

a. Planned activities

(an outline of activities planned for next reporting period, arranged by output)

b. Sustainability (final report only)

(an assessment of the extent to which the positive effects of the Project will continue after the external assistance has been concluded, and status of vehicles/equipment purchased by Project)

c. Lessons learned (final report only)

(a summary of main lessons learned during Project lifespan)



Progress reports will be made publicly available.

Annex III Terms of Reference for audit

The auditor shall carry out the audit in accordance with any relevant national legislation as well as with international standards on auditing.

The objective of the audit is to audit 1) the annual financial statements of the Project as defined in Annex I to this Contract as well as 2) compliance with certain contractual obligations. The auditor shall be given a copy of the present Contract, and decides himself whether to submit one or two reports. The audit report(s) shall state the auditor's opinion/findings as to:

- Whether the financial statements and the cash/bank/financial position present fairly, in all material respects, the income and expenditures of the Project in accordance with an acceptable financial reporting framework
- Whether the audit has uncovered any material weaknesses in relevant internal control(s)
- Whether the funds have been deposited in a separate bank account in the name of the organisation and that accrued interest are reflected in the statement from the bank
- Whether the audit has uncovered any illegal or corrupt practices
- Whether receipts/income and expenditures are properly accounted for.
- Whether the financial statements are in accordance with the records and books of accounts maintained by the Project.
- Whether the expenditure incurred by the Project is properly documented and is in line with the budget.
- Whether the internal control system exists and is working efficiently to identify possible fraud or material misstatement.
- Whether the expenditures for each activity as per the activity budget are traceable and report on the variance in line with the budget.
- Whether the auditor has obtained all the information and explanation necessary for the purpose of the audit.

The above list does not preclude the organisation or the auditor from addressing further issues.

The auditor shall also, if the auditor deems it warranted based on findings during the audit, submit a management letter to the organisation upon completion of the audit. The letter should address deficiencies noted in the system of internal control.

