Annex 1: List of data to be collected

The data listed in the column ‘indicators’ are the inputs for the Siting Tool and need to be collected.  
Principles, criteria and indicators for the Siting Tool (specified for oil palm in Indonesia)   
Source: Smit et al 2013  
  
Principle  
  
Criteria  
  
Indicator  
  
1. The area is biophysically suitable for palm cultivation  
  
1.1 Suitable climate  
1.2 Suitable topography  
1.3 Suitable soil  
  
1.1.1 Rainfall  
1.1.2 Slope  
1.1.3 Elevation  
1.1.4 Drainage  
1.1.5 Soil texture  
1.1.6 Soil depth  
1.1.7 Soil erosion risk  
1.1.8 Soil chemical properties  
  
2. Conservation values must be maintained or enhanced  
  
2.1 Valuable biodiversity is protected or enhanced on a population, meta-population and ecosystem level  
2.2 Ecosystem services are maintained  
  
2.1.1 Formal protection and conservation areas (HCV 1.1)  
2.1.2 Distribution and habitats protected and endangered species (Red List, CITES) (HCV 1.2 – HCV 1.3 – HCV 1.4)  
2.1.4 Endangered ecosystem intact landscapes and large scale intact forest (HCV 2&3)  
2.2.1 Hydrological functions (HCV 4.1)  
2.2.2 Erosion risk (HCV 4.2)  
2.2.3 Buffer zones large scale fire (HCV 4.3)  
2.2.4 Carbon stocks  
  
3. Human wellbeing is ensured and land (use) rights are respected  
  
3.1 Community use is respected  
  
3.1.1Displacement of current land use is avoided or compensated for through FPIC  
3.1.2 Valid ownership claims are respected  
  
Indicator  
  
Description   
  
  
Current land cover/use  
  
Displays different land uses, forests, mangroves, savannah, water bodies, roads, human settlement, croplands, hunting areas, etc.  
  
Carbon stocks  
  
Displays estimated carbon stocks (default values) for different vegetation types, especially for vegetation types with high carbon stocks such as forests, mangroves, (peat) swamps   
  
High biodiversity conservation sites  
  
Displays conservation sites (protected areas, nature reserves etc) as defined by relevant government departments  
  
Distribution and habitats of protected and endangered species  
  
Distribution data for protected and endangered flora and fauna (list of Red list & CITES species in target area) and its habitats. Including important bird areas and wetlands.  
  
Endangered ecosystem intact landscapes, and large scale intact forest  
  
Land cover + ecosystem distribution data (including peat, mangrove, wetlands)  
  
Water resources/ Hydrological functions   
  
Displays water resources lakes, streams, rivers, springs, water catchments and coastlines  
  
Buffer zones large scale fire  
  
Distribution of vegetation types that are natural buffer zones against fires  
  
Elevation  
  
Displays elevation in meters for the project site  
  
Slope  
  
Displays slopes in project sites presented in percentage   
  
Rainfall  
  
Displays mean annual rainfall in millimetres  
  
Soil drainage  
  
Displays soil drainage for each project site  
  
Soil depth  
  
Displays soil depths for each project site  
  
Soil acidity  
  
Displays soil acidity for each project site  
  
Soil Type/texture  
  
Displays soil types for each project site but mostly to be reclassified according to the FAO Digital Soil Map of World categories  
  
Soil erosion risk  
  
Displays erosion category for each site in ton/ha/year  
  
Soil chemical properties  
  
Displays soil chemical properties  
  
Tree cover change 2001- 2012  
  
Displays areas of tree cover losses and gains defined as “stand replacement disturbance,” or complete removal of tree cover canopy due to timber harvesting, fires, disease attack and conversion to other land uses.   
  
Legal classification of forest estate  
  
Displays different forest types according to official classification by forest national code  
  
Timber exploitation   
  
Displays all categories of forest exploitation including concession with approved management plan, those with management plans being under review, those under temporary agreement  
  
Mining exploitation  
  
Displays areas with mining permits issued by the government  
  
Agro-industrial Plantations  
  
Displays areas with agro-industrial activities in the project sites  
  
Socio-political boundaries  
  
Displays national and national administrative units and boundaries  
  
Roads  
  
Displays public roads, forest roads and farm-to-market roads.  
  
Settlements  
  
Displays the major human settlement areas.   
  
Population distribution and densities  
  
Displays population density within the project sits including indigenous population such as pygmies, etc.  
  
Ownership/land rights  
  
Data about ownership: boundaries of land ownership, total amount of hectares owned by one farmer.  
  
Annex 2: Siting tool briefing paper  
See: <http://www.snvworld.org/en/redd/publications/reap-siting-tool-briefing-paper>   
  
Annex 3: Indicative ToC  
List of figures  
List of tables  
Executive summary  
Overview of study areas   
Methodology   
Key findings  
Conclusion & recommendations  
Background  
Introduction  
Objectives  
Project background  
Structure of the report  
Chapter 1: Study area   
Eastern province  
Situation in Target areas  
Topography  
Hydrology  
Forest status and forest cover  
Socio economic situation  
Chapter 2: Methodology  
SNV Siting Tool  
Adjusting methodology   
Applying the SNV Siting Tool  
Analysing biophysical suitability  
Multi-Criteria Analysis  
Identifying conservation values   
HCV 1: Areas with important levels of biodiversity  
HCV 2: Natural landscapes and dynamics  
HCV 3: Rare or endangered ecosystems  
HCV 4: Environmental services  
Carbon stock distribution  
Economic evaluation  
Chapter 3: Results  
Selected method for biophysical suitability analysis  
Results of the Multi-Criteria Analysis   
Distribution of High Conservation Values  
HCV 1: Areas with important levels of biodiversity  
HCV 2: Natural landscapes and dynamics  
HCV 3: Rare or endangered ecosystems  
HCV 4: Environmental services  
Carbon stock distribution  
HCV risk indicator map  
Economic evaluation: Impacts of climate change on commodities  
Chapter 4: Vision for sustainable development  
Priority areas and interventions  
Next steps in priority areas  
  
[1] <http://bettercotton.org/about-bci>. Members of the global cotton supply chain address the negative impacts of mainstream cotton production by supporting this globally recognized definition, generating market demand for Better Cotton, and sharing information and knowledge to enable continuous improvement on everybody’s part. SIDA and Rabobank Foundation are both supporters of this initiative which aggregates over 600 global retailers, manufacturers, processors and traders.