|  |  |
| --- | --- |
|  |  |
| **UE_EN.bmp** |

***System of Environment-Economic Accounts (SEEA)***

**Experimental Ecosystems/Natural Capital Accounts for Mauritius, 2000 – 2010**

**Part 3: Technical notes**

**1 - Catalog of data used for SEEA-ECA Mauritius, version 1 (14 Sept. 2013)**

Prepared by Anand Soukun & Jean-Louis Weber

**A - Structure**:

Shapefiles:

two types: as delivered by project partners and the shp files used for ECA after reprojection when needed

10rND\_RastersMU:

10r stands for raster of 10m; ND stands for NoData

10rZR\_RastersMU:

10r stands for raster of 10m; ZR stands for Zero (instead of NoData); rm stands for raster mosaicked with the standard window (‘Grid System’) defined from the CSO shp file Island\_Islets

10r\_smoothed:

10r smoothed (Gaussian Blur or Filter…) are coded 10r10s or 10r5s, the s standing for smoothed and the number for the smoothing radius (10 or 5 times the grid cell…)

100rRastersMU:

100r rasters are produced from the Aggregate function of SAGA (or equivalent in other GIS package) with 10rZR\_RastersMU or 10r\_smoothed as input. Note that they are made from ZR files… They are a statistic by hectares of 10r cells. Two sub folders distinguish the basic 100r and the 100r5s files which will be used for spatial analysis and landscape accounts.

LandCover\_MU:

The layers prepared for the mosaicking of the land cover map of MU; it includes 1 ZR10r layer (whole island) and ND10r10s or ND10r5s files. Intermediate compositions are kept

CALC:

Calculation of first ECA components.-

NDVI\_EVI: MODIS products inputs re vegetation indexes, VCF and evapotranspitation StatUnits\_SELU: reference layers such as districts, VCA, river catchments

**B - Catalog**

1. **Shapefiles**
	1. Supplied\_shp

Backup of shape files as supplied by the project partners.

* ADD\_GIS
	+ districts2
	+ lagoons
	+ reefs
	+ soils\_add
	+ Topography\_NationalGrid
	+ VCA
* CLEWS\_GIS
	+ cane
	+ catch\_iso\_intr
	+ foodcrop
	+ irri
	+ isohyet\_polyt
	+ landcover3
	+ marginalland
	+ marginalland\_tif
	+ maucoor\_soilprofiles
	+ mcrops
	+ rice
	+ soil\_polygon\_table
	+ Soil\_profile\_table
	+ tea
* CSO\_Buil\_Road\_shp
	+ Build\_2002
	+ Build\_final\_2011
	+ Final\_RoadCenterline
	+ roadBR
* CSO\_exports
	+ TOPOGRAPHY\_1.gdb
	+ BASEMAP.gdb
	+ SHP
* ESA\_GIS
	+ boreholes
	+ cane\_ownership
	+ caves
	+ coast
	+ coast\_utm
	+ coastmarshland
	+ coral\_reefs
	+ districts1
	+ ESA\_Islets
	+ ESA\_Rivers
	+ forestquality
	+ mangroves
	+ mudflats
	+ sandbeachdune
	+ slopeesa
	+ upmarshland
* FOREST\_GIS
	+ Black\_River\_Park
	+ cane\_owner
	+ cane\_track
	+ coast
	+ coral\_reefs
	+ district\_boundary
	+ forest\_quality
	+ forested
	+ geology
	+ High\_quality\_forest
	+ highqualityforestblue
	+ Improvement\_recommand
	+ irrigated\_areas
	+ lease\_land\_forest
	+ mountain\_slope\_40%
	+ Mtius\_motorway
	+ new\_road\_c
	+ newrd\_b
	+ NewrdA
	+ Northforest
	+ reef
	+ river
	+ road\_c\_2007
	1. CSO\_Exports
		1. CaneTrack.shp
		2. District.shp
		3. EA.shp
		4. EA2012.shp
		5. EAMauritius2012.shp
		6. Island.shp
		7. IslandwithIslets.shp
		8. Lakes.shp
		9. Lakes\_corr.shp
		10. Motorway.shp
		11. PSU\_Census2011.shp
		12. River.shp
		13. Road.shp
		14. Road\_name.shp
		15. Slope\_0011.shp
		16. Slope\_1120.shp
		17. Slope\_more20.shp
		18. Subdistricts.shp
	2. CLEWS
		1. cane.shp
		2. cane\_Own2.shp
		3. cane\_Own3.shp
		4. caneOwnEsta.shp
		5. caneOwnPlan.shp
		6. Catch\_Isotye.img.vat.shp
		7. Catch\_Isotyet.shp
		8. Catch\_Isotyet\_Project.shp
		9. Catch\_Isotyet\_Select.shp
		10. CLEWS\_LanCov\_corr.shp
		11. CLEWS\_LandCov\_corr.shp
		12. CLEWS\_LandCover.shp
		13. fcrop.shp
		14. Foodcrop.shp
		15. FoodCropCorr.shp
		16. Irrigation.shp
		17. Isohyet\_PolyT.shp
		18. LandCover100000.shp
		19. MarginalLandSugar.shp
		20. mcrop.shp
		21. Rice.shp
		22. Soil\_PolygonTable.shp
		23. SoilORSTOM84.shp
		24. SoilProfilTable.shp
		25. SugarCane.shp
		26. Tea.shp
	3. ESA
		1. Boreholes.shp
		2. Boreholes\_2013.shp
		3. Cane\_ownership.shp
		4. Caves.shp
		5. CoastMarshland.shp
		6. CoastUTM2013.shp
		7. CoastUTM2013.tif.vat.shp
		8. Coral\_reefs.shp
		9. ForestQualHigh.shp
		10. ForestQuality.shp
		11. ForestQualLow.shp
		12. ForestQualVHigh.shp
		13. ForQualLow.shp
		14. ForQualVhigh.shp
		15. Islets2013.shp
		16. Mangroves.shp
		17. Mudflats.shp
		18. Rivers\_2013.shp
		19. SandBeachDunes.shp
		20. Slope\_0011.shp
		21. Slope\_1120.shp
		22. Slope\_MOR20.shp
		23. Slope\_percent.shp
		24. UpMarshland.shp
	4. ESA2\_Shapefiles
		1. Airport.shp
		2. BRGNationalPark.shp
		3. Buildings\_public.shp
		4. BuildUpAreas.shp
		5. BuiltUpAreas.shp
		6. BuiltUpAreas3.shp
		7. CaveEntrances.shp
		8. CriticalRiskZones.shp
		9. Districts.shp
		10. DSBswithSGZs.shp
		11. Lagoons.shp
		12. LandUse\_agri.shp
		13. MarineParks.shp
		14. MuniSewerage.shp
		15. NatureReserves.shp
		16. PasGeometriques.shp
		17. PO\_MountainReserves.shp
		18. Proposed\_quarries.shp
		19. ProposedAquaculture.shp
		20. ProposedQuarries.shp
		21. ProtectedAreas.shp
		22. PublicBeaches.shp
		23. RiverMain.shp
		24. Rivulets.shp
		25. SeaGrass.shp
		26. SewerOutfalls.shp
		27. SoilMap.shp
		28. UncommittedStateLandt.shp
		29. VCA.shp
	5. FOREST
		1. Black\_River\_National\_Park.shp
		2. Cane\_ownership.shp
		3. Canetrack.shp
		4. Coast.shp
		5. Coral\_Reefs.shp
		6. District\_boundary.shp
		7. Forest\_Quality.shp
		8. ForestedAreas.shp
		9. Geology.shp
		10. Highest\_quality\_forest.shp
		11. HighQualityForest\_BlueArea.shp
		12. Improvement\_Recommendation.shp
		13. IrrigatedAreas.shp
		14. LeaseLandForest.shp
		15. Motorway.shp
		16. mountain\_slope\_40%\_reserve.shp
		17. NewRoadA.shp
		18. NewRoadB.shp
		19. NewRoadC.shp
		20. NorthForest.shp
		21. Reefs.shp
		22. Rivers\_Polylines.shp
		23. Road\_c\_2007.shp
	6. ADD\_GIS
		1. BuildUrbNoDat10r10s1.vat.shp
		2. Cane\_new1.tif.vat.shp
		3. Districts.shp
		4. Export\_Output.shp
		5. FoodCrop\_new11.tif.vat.shp
		6. FoodCrop\_new111.tif.vat.shp
		7. Lagoons.shp
		8. Reefs.shp
		9. Soils.shp
		10. Tea\_new1.tif.vat.shp
		11. Tea\_plantations.shp
		12. VCA.shp
1. **10rND\_RastersMU**
	* 1. BldUrb08ND10r.sdat
		2. BuiltUpAreas2000ND10r.sdat
		3. CaneND10r.sdat
		4. CaneTrackND10r.sdat
		5. CaveND10r.sdat
		6. CoastMarshND10r.sdat
		7. CorReefND10r.sdat
		8. FoodCropND10r.sdat
		9. ForesQHiND10r.sdat
		10. ForesQLoND10r.sdat
		11. ForesQVHiND10r.sdat
		12. ForesTotND10r.sdat
		13. ForestTOTND10r.sdat
		14. IrrigAreasND10r.sdat
		15. LagoonsND10r.sdat
		16. LagoonsTOTND10r.sdat
		17. MangrovND10r.sdat
		18. MotorwayND10r.sdat
		19. MudflaND10r.sdat
		20. RiverMainND10r.sdat
		21. RoadAND10r.sdat
		22. SanBeaDunND10r.sdat
		23. SandBeaND10r.sdat
		24. SeaGrassND10r.sdat
		25. SugarCaneTOTND10r.sdat
		26. SugarCaneTOTZR10r5s.sdat
		27. TeaND10r.sdat
2. **10rZR\_RastersMU**
	* 1. BldUrb08ZR10r.sdat
		2. BldUrb08ZR10rm.sdat
		3. BuildUrb2000ZR10rm.sdat
		4. CaneTrackZR10rm.sdat
		5. CaveZR10rm.sdat
		6. CoastMarshZR10r.sdat
		7. Coral reefsZR10r.sdat
		8. CorReefZR10rm.sdat
		9. FoodCropZR10rm.sdat
		10. ForesQLoZR10rm.sdat
		11. ForesQVHiZR10rm.sdat
		12. ForesQZRHi10rm.sdat
		13. ForesTotZR10rm.sdat
		14. IrrigAreasZR10r.sdat
		15. LagoonsZR10r.sdat
		16. LakeZR10rm.sdat
		17. MangrovZR10rm.sdat
		18. MangroZR10rm.sdat
		19. MotorwayZR10rm.sdat
		20. MudflaZR10rm.sdat
		21. RiverMainZR10r.sdat
		22. RoadAZR10rm.sdat
		23. SandBeaZR10rm.sdat
		24. SeagrassZR10r.sdat
		25. TeaZR10rm.sdat
		26. UpMarshZR10rm20s.sdat
3. **10r\_smoothed**
	* 1. BldUrb08ND10r10s.sdat
		2. BldUrb08ZR10r10s.sdat
		3. BuildUrb2000ZR10r10s.sdat
		4. CaneTrackZR10r10s.sdat
		5. CaneTrackZR10r20s.sdat
		6. CoastMarshZR10r5s.sdat
		7. Food cropsZR10r5s.sdat
		8. ForesTotZR10rm5s.sdat
		9. LakeZR10r5s.sdat
		10. MangrovZR10r10s.sdat
		11. MangroZR10r10s.sdat
		12. MotorwayZR10r5s.sdat
		13. MudflaZR10r10s.sdat
		14. RoadAZR10r5s.sdat
		15. SandBeaZR10rm5s.sdat
		16. TeaZR10r5s.sdat
4. **100rRastersMU**
	1. 100r\_InputLayers

|  |  |
| --- | --- |
| Long names | Short names (as in dbf) |
| * + 1. M01\_Urban2000.sdat
		2. M01\_Urban2010.sdat
		3. M02\_Transport infr.sdat
		4. M05\_Tea.sdat
		5. M06A\_SugarCaneTOT.sdat
		6. M06m07\_SugarCaneNOirrig.sdat
		7. M07\_SugarCane\_irrig.sdat
		8. M08\_Food crops.sdat
		9. M12\_Forest.sdat
		10. M13\_Mangroves.sdat
		11. M17\_Upland marsh.sdat
		12. M18\_Coast marsh.sdat
		13. M19\_Rivers.sdat
		14. M20\_Lake.sdat
		15. M22\_Mudflats.sdat
		16. M23\_Beaches&dunes.sdat
		17. M24\_Coral reefs.sdat
		18. M25A\_SeaGrassTOT.sdat
		19. M26A\_LagoonsTOT.sdat
 | M01\_Ur00.sdatM01\_Ur10.sdatM02\_Tran.sdatM05\_Tea.sdatM06\_SCTo.sdatM06ASCRa.sdatM07\_SCIr.sdatM08\_Food.sdatM12\_Fore.sdatM13\_Mgro.sdatM17\_UpMa.sdatM18\_CoMa.sdatM19\_Rivr.sdatM20\_Lake.sdatM22\_Mudf.sdatM23\_Beac.sdatM24\_Cora.sdatM25ASGrT.sdatM26ALagT.sdat |

* + 1. MosaicRef\_large00ZR10rm.sdat
	1. 100r5s\_InputLayers
		1. xxx
	2. 100rLandscapeLayers
		1. Diff\_M01\_2010-2000.sdat = CHUr0010.sdat
		2. Xxx
1. **CALC**
	1. MU\_BioCarbon\_final\_results\_Emil11Sept13
		1. NPP\_cleaned
			* NPP\_2000.sdat
			* NPP\_2000adjustfinal.sdat
			* NPP\_2010.sdat
			* NPP\_2010adj100r.sdat
			* NPP\_2010adjust1.sdat
			* NPP\_2010adjustfinal.sdat
			* NPP\_change\_00-10.sdat
			* WoodyBiomass2000\_100r.sdat
			* WoodyBiomass2010\_100r.sdat
		2. Av30Yrainfall.sdat
		3. Orstom\_soil rock%100r.sdat
		4. soil\_respir2000.sdat
		5. soil\_respir2010.sdat
		6. SoilCarbon.sdat
		7. SoilFAOpc\_rock100r.sdat
		8. SoilORSTOM84 [rock\_pc].sdat
		9. SoilRespir2000\_100r.sdat
		10. SoilRespir2010\_100r.sdat
		11. Topsoil\_carbon\_FAO.sdat
		12. admin\_NPP\_SoilRespiration.shx
		13. Adm\_NPPMU.shx
	2. MU\_WaterACC
		1. MOD16A32010.tif
		2. MOD16A32000.tif
		3. MOD16A3.tif
		4. MOD16A32000\_100r.sdat
		5. EvaTr10Adj1.sdat
		6. EvaTr00Adj1.sdat
		7. Av30Yrainfall.sdat
		8. MU\_WaterAccts\_Tab1.xlsx
		9. DraftMauritius\_time\_series\_revised\_v16.xlsx
		10. DbasePrecip\_2000\_2010.xlsx
	3. Other
		1. Catchment100r.sdat
		2. DistrictID100r.sdat
		3. Catchment\_Calc.dbf
		4. Catchments\_ECA.dbf
		5. Catchments\_ECA\_calc1.dbf
		6. Catchments\_ECA\_calc2.dbf
		7. Catchments\_ECA\_calc3.dbf
		8. Catchments\_ECA2.dbf
		9. Districts.dbf
		10. Districts\_calc1.dbf
		11. Districts\_calc2.dbf
		12. VCA\_ECA1.dbf
		13. VCA\_ECA3.dbf
		14. ZonalStM01\_00Ca2.dbf
		15. Catchment\_Calc.shp
		16. Catchments\_ECA.shp
		17. Catchments\_ECA\_calc1.shp
		18. Catchments\_ECA\_calc2.shp
		19. Catchments\_ECA\_calc3.shp
		20. Catchments\_ECA2.shp
		21. Districts.shp
		22. Districts\_calc1.shp
		23. Districts\_calc2.shp
		24. VCA\_ECA1.shp
		25. VCA\_ECA3.shp
2. **LandCover\_MU**
	1. NDLCv1\_MU
		1. M01\_Urban2000NDLCv1.sdat
		2. M01\_Urban2010NDLCv1.sdat
		3. M02\_Transport infrNDLCv1.sdat
		4. M05\_TeaNDLCv1.sdat
		5. M06A\_SugarCaneTOTNDLCv1.sdat
		6. M07\_SugarCane\_irrigNDLCv1.sdat
		7. M08\_Food cropsNDLCv1.sdat
		8. M0xx\_OtherLCv1.sdat
		9. M12\_ForestNDLCv1.sdat
		10. M13\_MangrovesNDLCv1.sdat
		11. M17\_Upland marshNDLCv1.sdat
		12. M18\_Coast marshNDLCv1.sdat
		13. M19\_RiversNDLCv1.sdat
		14. M20\_LakeNDLCv1.sdat
		15. M22\_MudflatsNDLCv1.sdat
		16. M23\_Beaches&dunesNDLCv1.sdat
		17. M24\_Coral reefsNDLCv1.sdat
		18. M25A\_SeaGrassTOTNDLCv1.sdat
		19. M26A\_LagoonsTOTNDLCv1.sdat
	2. ZRLCv1\_MU
		1. M01\_Urban2000\_ZRLCv1.sdat
		2. M01\_Urban2010ZRLCv1.sdat
		3. M02\_Transport infrZRLCv0.sdat
		4. M05\_TeaZRLCv1.sdat
		5. M06A\_SugarCaneTOTZRLCv1.sdat
		6. M07\_SugarCane\_irrigZRLCv1.sdat
		7. M08\_Food cropsZRLCv1.sdat
		8. M12\_ForestZRLCv1.sdat
		9. M13\_MangrovesZRv1.sdat
		10. M17\_Upland marshZRLCv1.sdat
		11. M18\_Coast marshZRLCv1.sdat
		12. M19\_RiversZRLCv1.sdat
		13. M20\_LakeZRLCv1.sdat
		14. M22\_MudflatsZRLCv1.sdat
		15. M23\_Beaches&dunesZRLCv1.sdat
		16. M24\_Coral reefsZRLCv1.sdat
		17. M25A\_SeaGrassTOTZRLCv1.sdat
		18. M26A\_LagoonsTOTZRLCv1.sdat
		19. MotorwayZR10rmLCv1.sdat
		20. RoadAZR10rmLCv1.sdat
	* ECA\_MU\_Classifications.xlsx
	* MU\_LandCover\_v01.png
	* The making of MU\_LCv1.pptx
	* Urb.pptx
3. **NDVI\_EVI**

**…**

1. **StatUnits\_SELU**
	1. districts2
	2. GRIDS\_MUBuffer
		1. Mauritius\_buffer10kWGS.shp
		2. MUbufferWGS84\_1.shp
	3. SlopeESA
		1. elevrstr20msk
		2. elevrstr20mv2
		3. elevstrmsk\_rastertin4
	4. Topography\_NationalGrid
	5. VCA
	6. Others
		1. Catchment100r.sdat
		2. CatchmentND100r.sdat
		3. CoastUTM\_100r.sdat
		4. CoastUTM\_ESANoDat10r.sdat
		5. CoastUTM\_ESANoDatINVER10r.sdat
		6. CoastUTM\_Mosaic\_ND100r.sdat
		7. CoastUTM\_Mosaic\_ND10r.sdat
		8. DistrictID100r.sdat
		9. DistrictID10r.sdat
		10. DistrictIDND10r.sdat
		11. Elevation10r.sdat
		12. Isohyet100sm.sdat
		13. Isohyet100smRes.sdat
		14. MosaicRef\_large00ZR10rm.sdat
		15. MosaicRef\_large100rm.sdat
		16. Ref0MU.sdat
		17. SoilORSTOM84\_10r.sdat
		18. SteepSlopes10r.sdat
		19. SubdistrictID10r.sdat
		20. CatchECA.shp
		21. Catchments\_ECA.shp
		22. CoastUTM2013.shp
		23. Coral\_reefs.shp
		24. Districts.shp

**2 - Catalog of data used for SEEA-ECA Mauritius, Addendum of 31 Oct. 2013**

SECU\_CReef1.shp

Coral\_reefs.shp

CoastSeaUnits5.shp

VCA\_ECA3.shp

Districts\_calc2.shp

Districts.shp

SCat\_WAT2.shp

SCat\_WAT1.shp

MCA\_WAT2.shp

MCA\_WAT1.shp

MCA\_ECA\_POPLC2.shp

Lakes\_corr.shp

Lake2010.shp

Lake2000.shp

DrainageAreas\_codes.shp

Dist\_Water3.shp

Boreholes2013b.shp

RoadMtw.sgrd

NONShrub\_trunc.sgrd

NONShrub\_calc.sgrd

NLEP2010.sgrd

MCAPop10M1.sgrd

MCAPOP00M1.sgrd

GLITea.sgrd

GLISCRf.sgrd

GLISCIr.sgrd

GLINaWet.sgrd

GLIGShru.sgrd

GLIForT.sgrd

GLIFood.sgrd

GLIArti10.sgrd

GLIArti00.sgrd

GBLI2010.sgrd

GBLI\_Calc\_2010.sgrd

GBLI\_Artif.sgrd

FragRdMtw0-100.sgrd

RoadABMotw.shp

SELU\_BioC.shp

Dist\_BioC.shp

SCat\_BioC2.shp

MCA\_ECA\_POPLC2.shp

SCat\_BioC.shp

Isohyet30Mergd [ISOHYET\_MM].sgrd

RdMtwZR.sgrd

Island100pc0D.sgrd

GBLI2010.sgrd

NatWetDom50ZR.sgrd

UrbanDom50ZR.sgrd

ForestDom50ZR.sgrd

AgriDom50ZR.sgrd

ChangUrb0010\_hapc.sgrd

Harvst\_SubCatch.shp

Harvst\_District.shp

SugarTOT.sgrd

FamilGarden.sgrd

TOTHarv2010.sgrd

Sugar\_IrrigD.sgrd

SugarRainfed0D.sgrd

TotFoo10.sgrd

FCrops\_tons.sgrd

CanePotato.sgrd

Tea\_tons.sgrd

M01LessT70\_01.sgrd

M01LessT70pc0D.sgrd

M01lessthan70pc.sgrd

SugarRainfedND.sgrd

SugarIrrigND.sgrd

Sugar\_Irrig.sgrd

SugarRainfed.sgrd

SugarRain1.sgrd

Sugar\_Irrig1.sgrd

SugC\_Irrig\_0.sgrd

Boreholes2013b.shp

Dist\_Water1.shp

DrainageAreas\_codes.shp

Lake2000.shp

Lake2010.shp

Lakes\_corr.shp

MCA\_ECA\_POPLC2.shp

MCA\_WAT1.shp

MCA\_WAT2.shp

SCat\_WAT1.shp

SCat\_WAT2.shp

Boreholes [SCat\_WAT1] [ID].sgrd

ET2000\_Trunc\_sm.sgrd

ET2000Trunc\_nosmooth [Gaussian Filter].sgrd

ET2000Trunc\_nosmooth.sgrd

ET2010\_Trunc\_sm.sgrd

ET2010Trunc\_nosmooth [Gaussian Filter].sgrd

ET2010Trunc\_nosmooth.sgrd

EvpT00M3.sgrd

EvpT00mm.sgrd

EvpT10M3.sgrd

EvpT10mm.sgrd

Irrig00\_m3.sgrd

Irrig10\_m3.sgrd

Isohyet30Y.sgrd

Lake2000 [ID].sgrd

M01\_00noZR.sgrd

M01\_10noZR.sgrd

M01div10\_00noZR.sgrd

M01div10\_10noZR.sgrd

MOD16A2000trunk.sgrd

MOD16A2010trunk.sgrd

MOD16A32000\_1k.sgrd

MOD16A32000\_res.sgrd

MOD16A32010\_1k.sgrd

MOD16A32010\_res.sgrd

POP2000.sgrd

POP2010.sgrd

PoWat00m3Y.sgrd

PoWat10m3Y.sgrd

Ra00m3h\_sm10k.sgrd

Ra00m3hsm50.sgrd

Ra10m3h\_sm10k.sgrd

Ra10m3hsm50.sgrd

Rain00M3HA.sgrd

Rain00M3HA1k.sgrd

Rain00M3HA1ksm.sgrd

Rain10M3HA.sgrd

Rain10M3HA1k.sgrd

Rain10M3HA1ksm.sgrd

SCat\_Wat\_Intens1.sgrd

SCat\_WAT1 [ISLAND\_HA\_].sgrd

SCWIUI1.sgrd

WatAcces1ha.sgrd

WatAccHa1000m3.sgrd

WatAccTOTMm3.sgrd

Y00M01PCpop.sgrd

Y10M01PCpop.sgrd

CoastSeaUnits.shp

Isohyet30Mergd.shp

SELU\_DLT.shp

DLT50\_SELU [GRIDCODE].shp

DLT50\_SELU.shp

SubCatchSELU.shp

DLT50\_SELU.sgrd

DLT50\_SELU [GRIDCODE].sgrd

ForestDom50.sgrd

UrbArtiDom50.sgrd

AgriDom50.sgrd

NatWetDom50.sgrd

Natur [Gaussian Filter].sgrd

M01\_02 [Gaussian Filter].sgrd

GrasShrubOthe [Gaussian Filter].sgrd

Forest [Gaussian Filter].sgrd

Island100pc.sgrd

Wetland.sgrd

GrasShrubOthe.sgrd

Tot\_ClassifLCTrunc100.sgrd

Tot\_ClassifLCTrinc100.sgrd

Tot\_ClassifLC.sgrd

Natur.sgrd

Island100.sgrd

Forest.sgrd

Agri.sgrd

M01\_02.sgrd

DLT50v3.shp

DrainageAreas\_codes.shp

DrainageAreas\_Codes2.shp

MCA\_ECA3.shp

SubCatchECA\_MU.shp

SugFAreas24.shp

WAT\_Distrib\_ECA.shp

CoastSeaEcosysND.sgrd

DLT50v1.sgrd

DLT50v2.sgrd

DLT50v3.sgrd

Isohyet30Y.sgrd

LagRGManMudNoIslet.sgrd

SECU\_Areav1.sgrd

### Nomenclatures

|  |
| --- |
| **ECA\_MU Land Cover classification v1** |
| **Long name** | **Short name** |
|  |  |
| M01\_Urban fabric and associated areas | M01\_Urban |
| M02\_Transport infrastructure | M02\_Transport infra |
| M03\_Dispersed human settelments | M03\_Dispersed settlements |
| M04\_Homogeneous herbaceous cropland | M04\_Homogeneous cropland |
| M05\_Tea plantations | M05\_Tea |
| M06\_Sugar plantations, rainfed | M06\_SugarCane, rainfed |
| M07\_Sugar plantations, irrigated | M07\_SugarCane\_irrig |
| M08\_Agriculture food crops | M08\_Food crops |
| M09\_Pastures and natural grassland | M09\_Pasture\_grassland |
| M10\_Shrubland | M10\_Shrubland |
| M11\_Open tree cover | M11\_Open tree cover |
| M12\_Forested land | M12\_Forest |
| M13\_Mangroves | M13\_Mangroves |
| M14\_Natural vegetation mosaics | M14\_Natural mosaics |
| M15\_Sparsely vegetated areas | M15\_Sparsely veget areas |
| M16\_Baren soil, rocks | M16\_Baren soil |
| M17\_Upland marshland | M17\_Upland marsh |
| M18\_Coastal marshland | M18\_Coast marsh |
| M19\_Rivers and canals | M19\_Rivers |
| M20\_Lakes and reservoirs | M20\_Lakes |
| M21\_Estuaries | M21\_Estuaries |
| M22\_Mudflats | M22\_Mudflats |
| M23\_Sand, beaches and coastal dunes | M23\_Beaches&dunes |
| M24\_Coral reefs | M24\_Coral reefs |
| M25\_Sea grass no reef | M25\_Sea grass no reef |
| M26\_Other lagoon bed | M26\_Other lagoon bed |
|  |  |
| M06A\_SugarCaneTOT | M06A\_SugarCaneTOT |
| M25A\_Sea grass Total | M25A\_Sea grass TOT |
| M26A\_Lagoon total | M26A\_Lagoon TOT |



### ESA Systems and Types for Mauritius and Rodrigues

*(Source: Environmentally Sensitive Areas Classification Report Prepared for the Ministry of the Environment and the NDU (National Development Unit), Government of Mauritius. Prepared by: NWFS Consultancy 4050 NW Carlton Ct Portland, OR 97229 USA)*

|  |  |
| --- | --- |
| 1. Wetlands Systemsa. Coastal Marshlandsb. Upland Marshlandsc. Lakes and Reservoirsd. Rivers and Streamse. Mangrovesf. Inter-tidal Mudflats2. Shore Systemsa. Sand Beach and Dunes | 3. Offshore Systemsa. Seagrass and Algal Bedsb. Coral Reefsc. Islets4. Forest Systemsa. High Native Content (Flora)b. Native Fauna Habitat (endemic birds, bats and lizards)5. Stable Supply Systemsa. Boreholes (aquifer wells)b. Steep Slopes (soil stabilization, viewscape) |

### ESA Classification of ecosystem services

1) Conservation Services

a) the protection of biological diversity

b) the protection of biologically important areas

2) Provisioning and Regulation Services

a) food

b) fresh water

c) water and air purification

d) pollination of crops and native vegetation

e) control of pests and diseases

f) seed dispersal

g) carbon sequestration and climate regulation

h) protection of surface water and aquifers

I) protection of soil

3) Cultural Services

a) cultural spiritual and intellectual inspiration

b) recreational and ecotourism

c) scientific discovery



### Glossary

### Land cover: Correspondence between MU-Land cover classification and SEEA LCEFU (ECA version)

### Land cover flows: there is no major issue as long as the classification of flows is a grouping of the transition matrix between two land cover digital maps. The LEAC flows classification is implemented as a software which translates this matrix into flows . Changing groupings is therefore simple exercise and if required multiple outcomes can be designed from the same database.

### The ecosystem services classification of the SEEA Part 2 is still provisional. It is based on the Millennium Ecosystem Assessment classification and the discussions are either on specific improvements or on marginal proposals such as including subsoil resources in ecosystems or excluding agriculture products because in the SNA they are assigned to farmers instead of to Nature. These discussions are lasting since years and will continue. It doesn’t not really matters for SECA because ecosystem services are taken either in a much aggregated way (land/ biomass/ water/ biodiversity) or one by one in a case by case basis (functional analysis). A quick check of correspondences between SEEA’s CICES (Common International Classification of Ecosystem Services), SECA broad groups and the classification used in the Mauritius Environmentally Sensitive Areas report (in the same spirit as SECA) shows that basic block are well aligned.

### Ecosystem classification is a subject under discussion within the GEO/GEOSS international programme, GEO/BON sub-activity. The broad categories are those which can be identified via land cover classification; the detailed categories are very country specific and no issues can be foreseen in the context of this project. Appropriate detail will be included in due time, as long as data are available. In the short term, the categories used for the Environmentally Sensitive Areas (ESA) are a good basis for defining a first classification.

### Ecosystem capital and assets classification as such need to remain simple and will be based primarily on observable land features (as recommended in the SEEA Part 2).

### Other classifications are endogenous to the SECA model and might be adapted if required to the Mauritius case, in line with international standards and recommendations. It is the case of the definition of statistical units which will take into account specific information more detailed for example than in Europe.

### Concepts ???

**Definitions**

**The Environment-Economic Accounts (EEA):** a set of statistical accounts showing the interaction between the economy and the environment.

*Atmospheric Emissions accounting:* matrix, which identifies pollutant emissions by economic sector.

*Natural Resource Accounts*: These include data on stocks of natural resources and changes in them caused by either natural processes or human use. Such accounts typically cover agricultural land, fisheries, forests, minerals and petroleum, and water.[[1]](#footnote-1)

#### Environment

#### *Environment*: the totality of all the external conditions affecting the life, development and survival of an organism.

An *environmental indicator*: A parameter or a value derived from parameters that point to, provides information about and/or describes the state of the environment, and has a significance extending beyond that directly associated with any given parametric value.

#### Economy

*Gross Domestic Product (GDP)*: GDP is the aggregate money value of all goods and services produced within a country out of economic activity during a specified period, usually a year, before provision for the consumption of fixed capital.

*Energy intensity*: Energy intensity provides a measure of the efficiency with which energy is being used in production or energy used (tonnes of oil equivalent) per Rs 100,000 GDP (at constant prices).

*Energy accounts*: relate the use of energy to the economic activities of the industrial sector which is responsible for the use of the energy.

*Water balance*: The water balance is based on long term records of annual average rainfall and indicates how freshwater resources are distributed.

ABBREVIATIONS AND SYMBOLS

|  |  |
| --- | --- |
| Rs | Rupees |
| Rs mn | Rupees million |
| % | Percentage |
| 000 | Thousand |
| Mm3 | Million cubic metres |
| ktoe | Thousand tonnes of oil equivalent |
| Toe | Tonne of oil equivalent |
| DMC | Direct Material Consumption |
| DMI | Direct material Inputs |
| ECA | Ecosystem Capital Accounts |
| ENCA | Ecosystems/Natural Capital Accounts |
| EEA | Environment-Economic Accounts (SEEA) |
| EEA | Experimental Ecosystem Accounts (SEEA) |
| EEA | European Environment Agency |
| GVA | Gross Value Added |
| GDP | Gross Domestic Product |
| MFA | Material Flow Accounts |
| nLEP | Net Landscape Ecological Potential |
| PTB | Physical Balance of Trade |
| SNA | System of National Accounts |

1. [↑](#footnote-ref-1)