EO 4 Ecosystem Accounting 2022

Land Account SENEGAL 2010-2015

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→ THE EUROPEAN SPACE AGENCY

ECONOMIC AND ENVIRONMENTAL ACCOUNTING FOR EVIDENCE-BASED POLICY IN SENEGAL:

Aim: Remove the technical and institutional obstacles relating to the establishment of economic and environmental accounts at the national level.

MAIN ACTIVITIES

- **Capacity building**
- **Development of a national plan for the advancement of economic and environmental accounting**
- **Compilation of SEEA accounts**

In 2021-2022, the land cover account of Senegal 2010-2015 was compiled

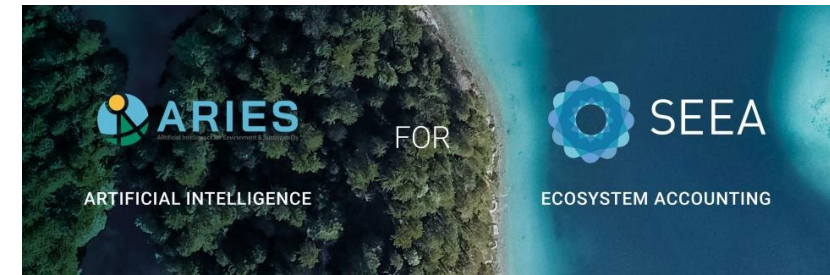## 1. ESTABLISHMENT OF A TECHNICAL COMITEE

- **National Agency of Statistics and Demography (ANSD);**

- **Department of Planning and Environmental Monitoring (DPVE);**

- **Department of Water and Forests, Hunting and Soil Conservation (DEFCCS);**

- **Ecological Monitoring Center (CSE);**

- **National Agency for Spatial Planning (ANAT);**

- **Department of Water Resources Management and Planning (DGPRE);**

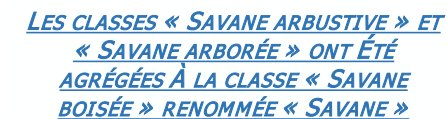- **Institute of Environmental Sciences (ISE)**

2. CAPACITY BUILDING AND WORKSHOPS

- **Training workshop on the ARIES for SEEA Explorer tool, August 24 to 25, 2021**

- **4 technical work meeting to harmonize the classification, October 12 to 27, 2021**

- **Workshop for the build of the land account, November 08 to 12, 2021**

- **Online capacity building sessions on the ARIES for SEEA Explorer tool, every Thursday over the period from February to April 2022;**

- **Land cover account report consolidation workshop, July 25-27, 2022**

3. DATA SOURCES

Two land cover maps produced by different operators (ANAT 2010, CSE 2015)

Year	2010	2015
Structure	ANAT	CSE
Resolution	30m	30m
Land cover classes	**13**	**24**
Period	November-December	November-December
Image	Landstat, Sentinel-2	Landstat 8 oli
Field check	**No**	**Yes**
Source for classification	Occ_sol_FAO 1984, REP-SAHEL, CSE	Yangambi nomenclature, topographic maps

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4. HARMONIZATION OF LAND COVER CLASSES

- **Adoption of a national nomenclature based on the CSE nomenclature that was field check and adapted to the need of ARIES: 19 classes**

- **Correction of geometric deviation**

- **Implementation in ARIES**

LES CLASSES « ZONE D'EXPLOITATION MINIÈRE » ET « ESPACE AÉROPORTUAIRE » ONT ÉTÉ AGRÉGÉES

LES CLASSES « SAVANE ARBUSTIVE » ET « SAVANE ARBORÉE » ONT ÉTÉ AGRÉGÉES À LA CLASSE « SAVANE BOISÉE » RENOMMÉE « SAVANE »
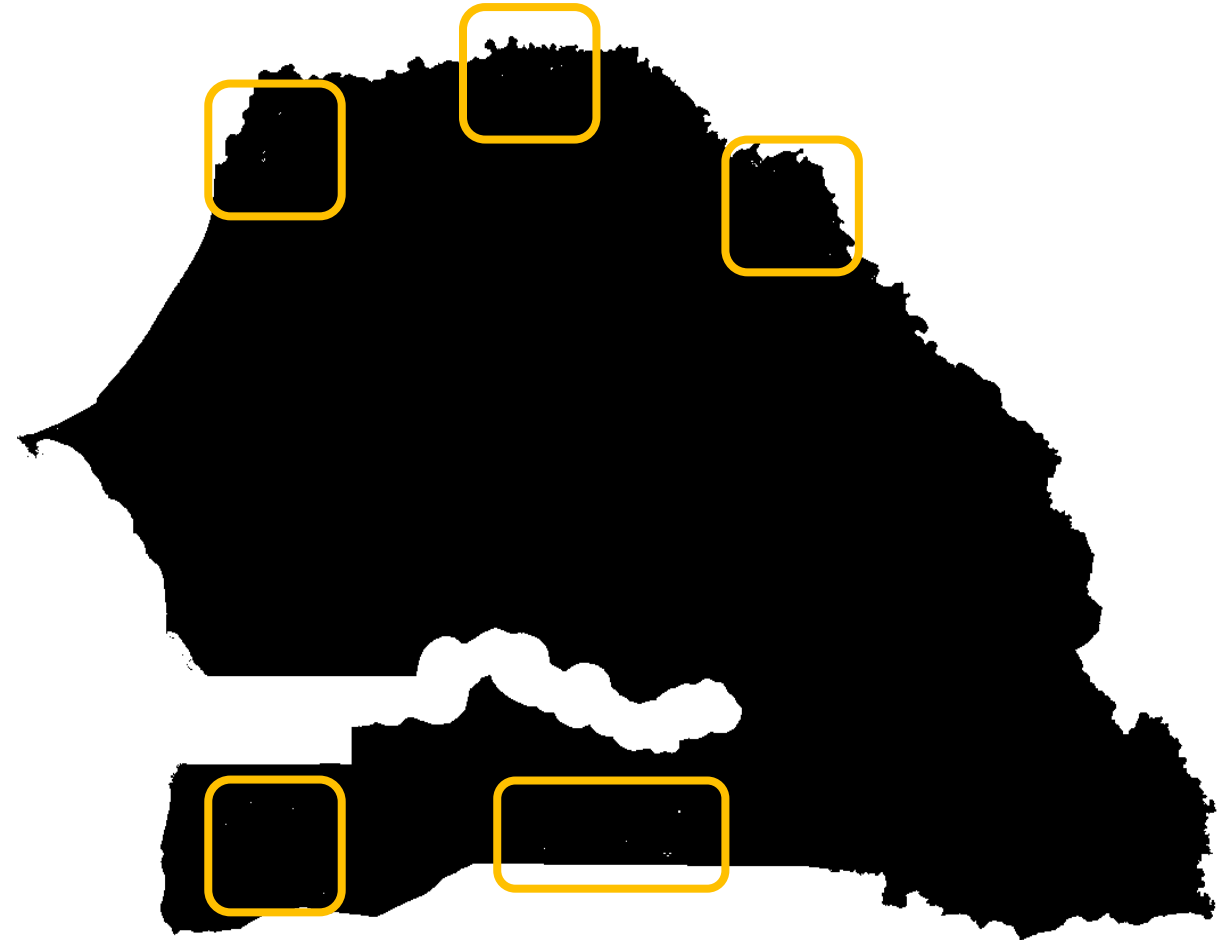
5. Consistency of the results

Difficulties: Missing data in some pixels, Different spatial context boundaries between 2010-2015, unlikely transitions

- Working with the UNSD expert to correct inconsistencies

- Analysis of unlikely transitions with the technical committee

- Implementation in ARIES and compilation of the results and SDG 15.1.1

Harmonized land cover class

Category	Classes
Artificial surfaces	Urban
	Industrial commercial transport
Bare area	Beach dune and sand
	Bare area
Cultivated area	Non irrigated arable land
	Permanently irrigated arable land
	Legume arable land
Wooded area	Open deciduous broadleaf forest
	Closed savanna
	Open savanna
	Sparse vegetation
	Mangrove
Water region	Permanent cropland
	Watercourse
	Still water body
	Seasonal water body
	Inland wetland
	Intertidal flat
	Vegetated still water body

Land cover map 2015

REPUBLIQUE DU SENEGAL
Occupation du sol en 2015

Localité
Sol nu
Dune cotière
Carrière - Mine - Infrastructure
Steppe
Savane
Forêt
Mangrove
Plantation forestière

Culture irriguée
Culture maraîchère
Culture pluviale
Cours d'eau
Lac
Mare
Plaine inondable
Vasière
Tanne
Prairie aquatique

anat
Agence nationale
de l'aménagement du Territoire

0   50   100 Km

Source: ANAT, 2010
Réalisation: ANAT,2022

NEXT STEPS

- **Year 2023: Implementation of the** **ecosystem extent account**

    MAJOR STEPS:

    1. **Definition of ecosystems types at national level**

    2. **Use of the land cover account**

    3. **Implementation in ARIES**

- **Study case: Carbon account**

- **Validation of the National plan for the advancement and promotion of economic and environmental accounting in Senegal**

THANK YOU FOR YOUR ATTENTION

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SENEGAL

LAND COVER MAPS