



Comité Permanent Inter Etats de Lutte contre la Sécheresse dans le Sahel

Centre Régional AGRHYMET

Workshop on "Achieving Benefits of Enhanced Service Delivery by NMSs in ESA"



AGRHYMET Assistance to NMSs In West Africa

**By Papa Oumar Dieye
Head of Communication**



Outline of the Presentation

Presentation of the AGRHYMET Regional Centre

AGRHYMET Operational Scheme

Presentation of National AGRHYMET Components (NACs)

Future Prospects

Presentation of CILSS

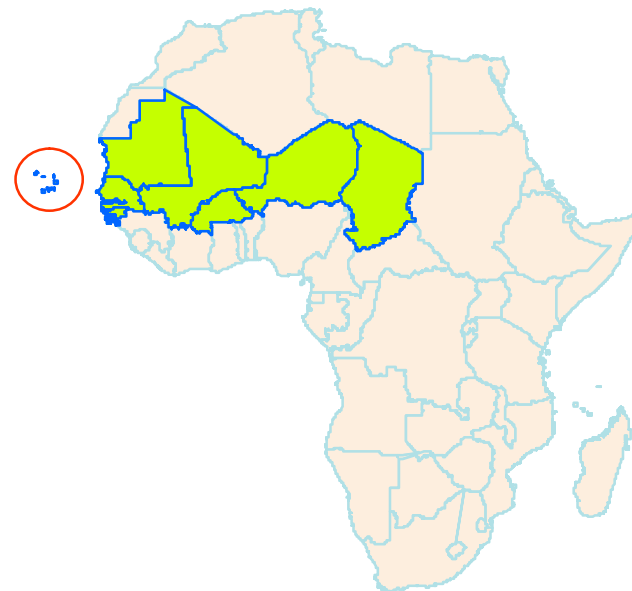
Permanent Interstate Committee for Drought Control in the Sahel

- **CILSS Member Countries**

Burkina, Cape Verde, Chad, The Gambia, Guinea-Bissau, Mali, Mauritania, Niger, Senegal.

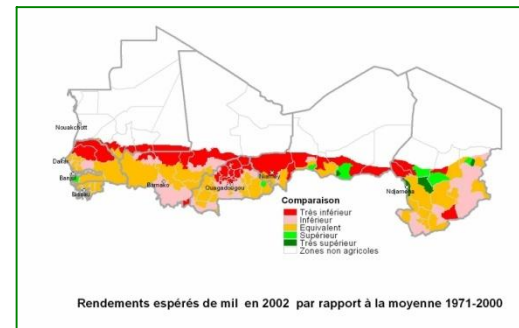
- **Main objective**

«To seek to assure food security and to combat the effects of drought and desertification for a new ecological balance»



The AGRHYMET Regional Centre

- **Specialized Institute of CILSS based in Niamey, NIGER**
- **Creation : December 1974**





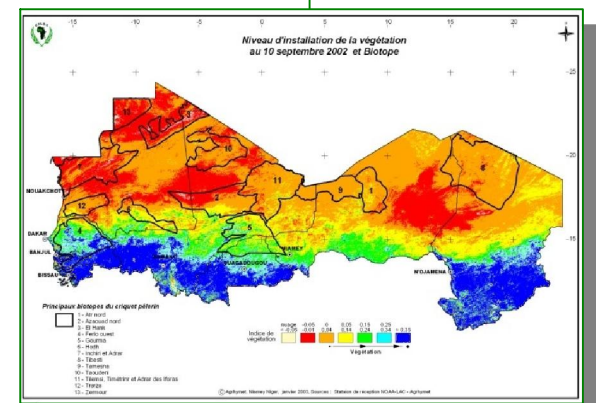
The AGRHYMET Regional Centre

Mandate

- **To collect, process and disseminate information on food security, water control and management and desertification control;**
- **To develop decision support tools to meet the Sahelian populations' development needs;**
- **To build technical capacities through training and the transfer of tools, methods and know-how adapted the Sahelian countries in climatology, agrometeorology, hydrology, information technology, crop protection, geomatics and telecommunication.**

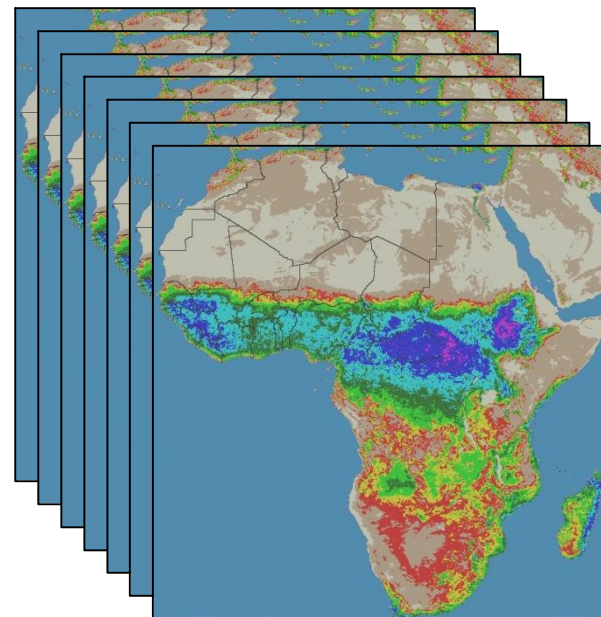
Information

- **Development of monitoring methods and techniques in food security and natural resource management**
- **Dissemination of information on regional policies : food security, early warning and natural resource management**
- **Training and transfer of tools, methods and know-how to the National AGRHYMET Components**



Information

- **Satellite images and their by-products :**
 - **NDVI (greenness) maps**
 - **Maps for monitoring lakes and ponds**
 - **Maps of Sea Surface Temperature**
 - **Maps for monitoring bush fires**
 - **Maps for monitoring pastures**



low resolution Images (NOAA / AVHRR and METEOSAT)

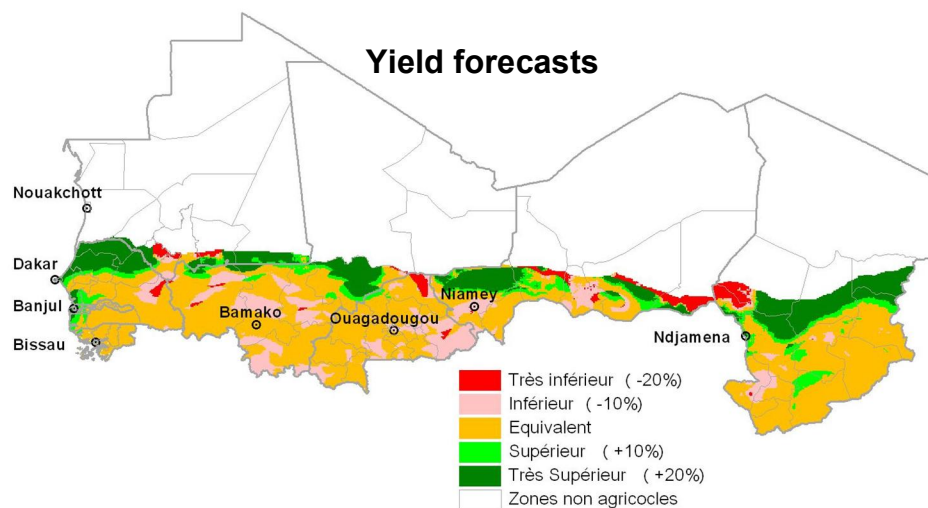
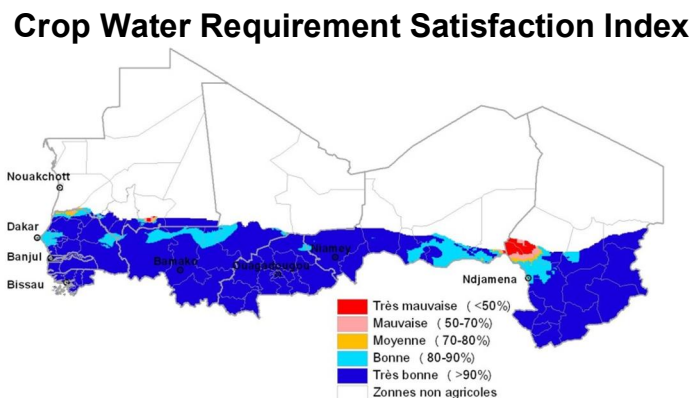
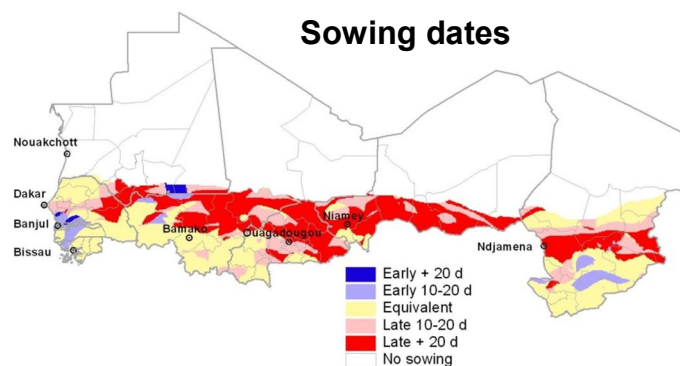


Information

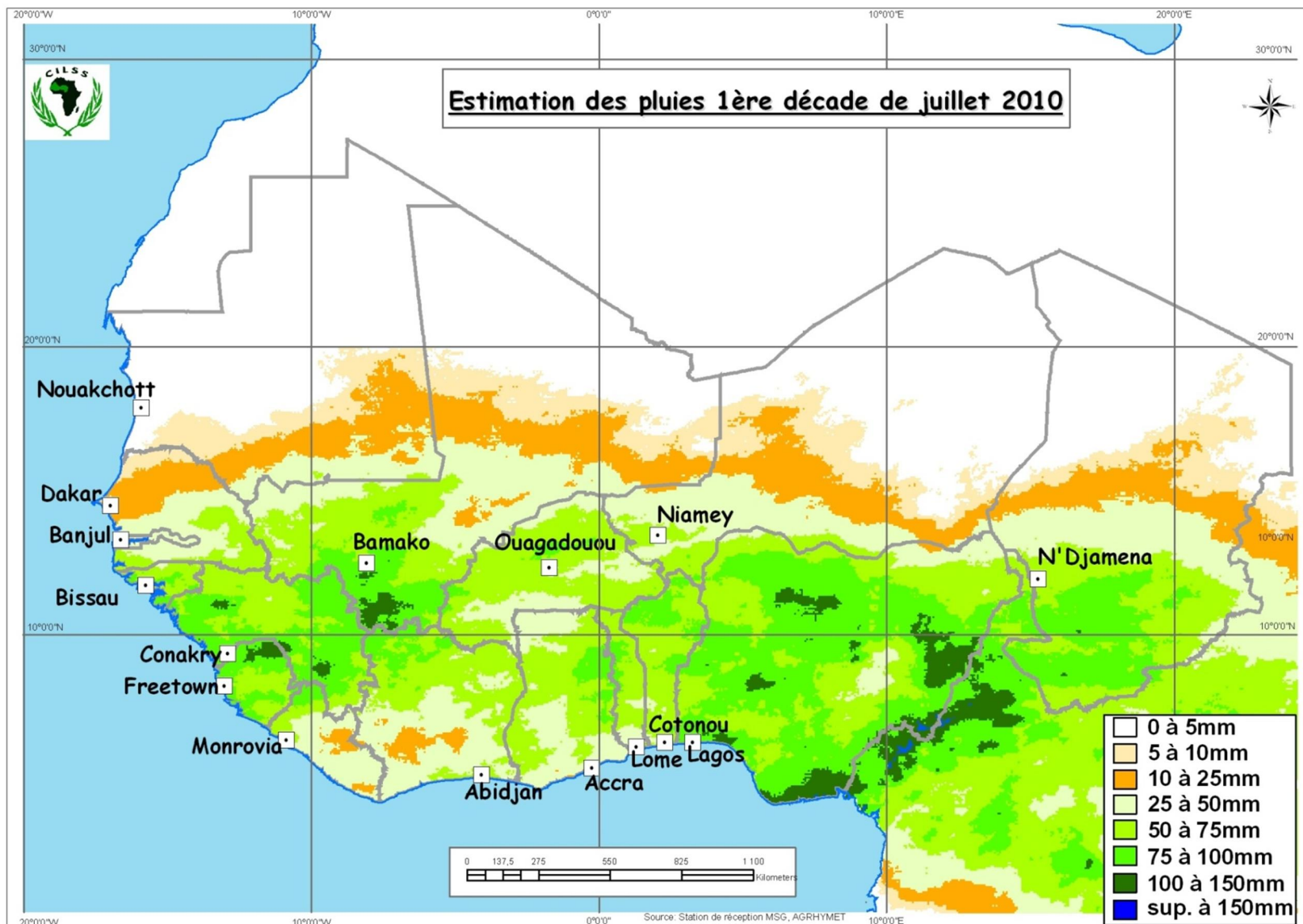
- **Satellite images and their by-products :**
 - **Maps of satellite-based rainfall estimates**
 - **Maps of crop water requirement satisfaction index**
 - **Maps of grass biomass estimates**
 - **Yield forecast maps**

Food Security Monitoring

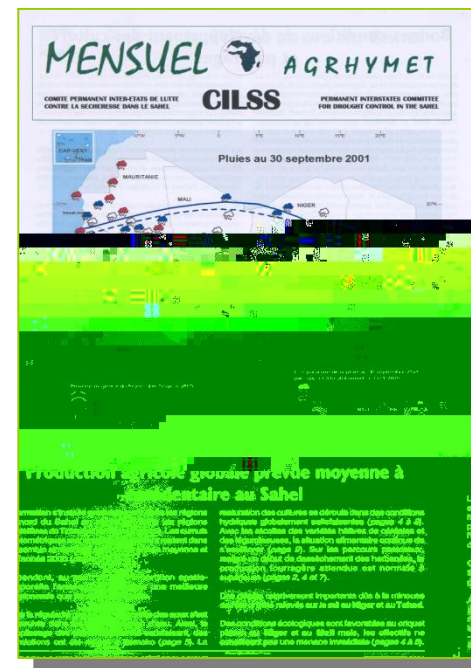
- Crop monitoring and yield forecasting



Satellite Rainfall Estimation



- **Other products of AGRHYMET :**
 - The AGRHYMET monthly bulletin for seasonal crop monitoring across the Sahel
 - The Decision makers' special bulletin
 - Tools for monitoring crops and assessing their water requirement satisfaction
 - Mapping and GIS tools



Training

- **Long-Term Training Programmes**
- **Master's Degree Programme in Concerted Natural resource Management : one year**
- **Engineer Course : 3 years**
 - Engineer Course in Hydrology
 - Engineer Course in Agrometeorology
 - Engineer Course in Instrumentation and Microcomputing
 - Engineer Course in Crop Protection
- **Higher Diploma Course: 2 years**
 - Higher Diploma Course in Hydrology
 - Higher Diploma Course in Agrometeorology
 - Higher Diploma Course in Instrumentation and Microcomputing
 - Higher Diploma Course in Crop Protection



Training

Long term training : From 1975 to 2010

1002 Officers of conception and higher technicians were trained in AGRHYMET.

Training in agrometeorology

- **Engineers : 100**
- **Higher technician: 157**



Training

- **Short-Term Training Programmes**

- Themes :

- *Sustainable agriculture*
- *Integrated pest management*
- *Gender and development*
- *Natural Resource Management*
- *Phytosanitary control*
- *Management of hydrological, climatological databases etc.*
- *etc.*

- Types of Training Programmes :

- *Group training*
- *Attachments*
- *Training at the customers' request*

Other activities:

- *Supervision of trainees*
- *Training supported research*





Research

1. Training Supported Research

It enables:

- To strengthen the scientific and technical base of the AGRHYMET's training programmes
- To build the capacities of the lecturers and to generate results utilisable on-farm

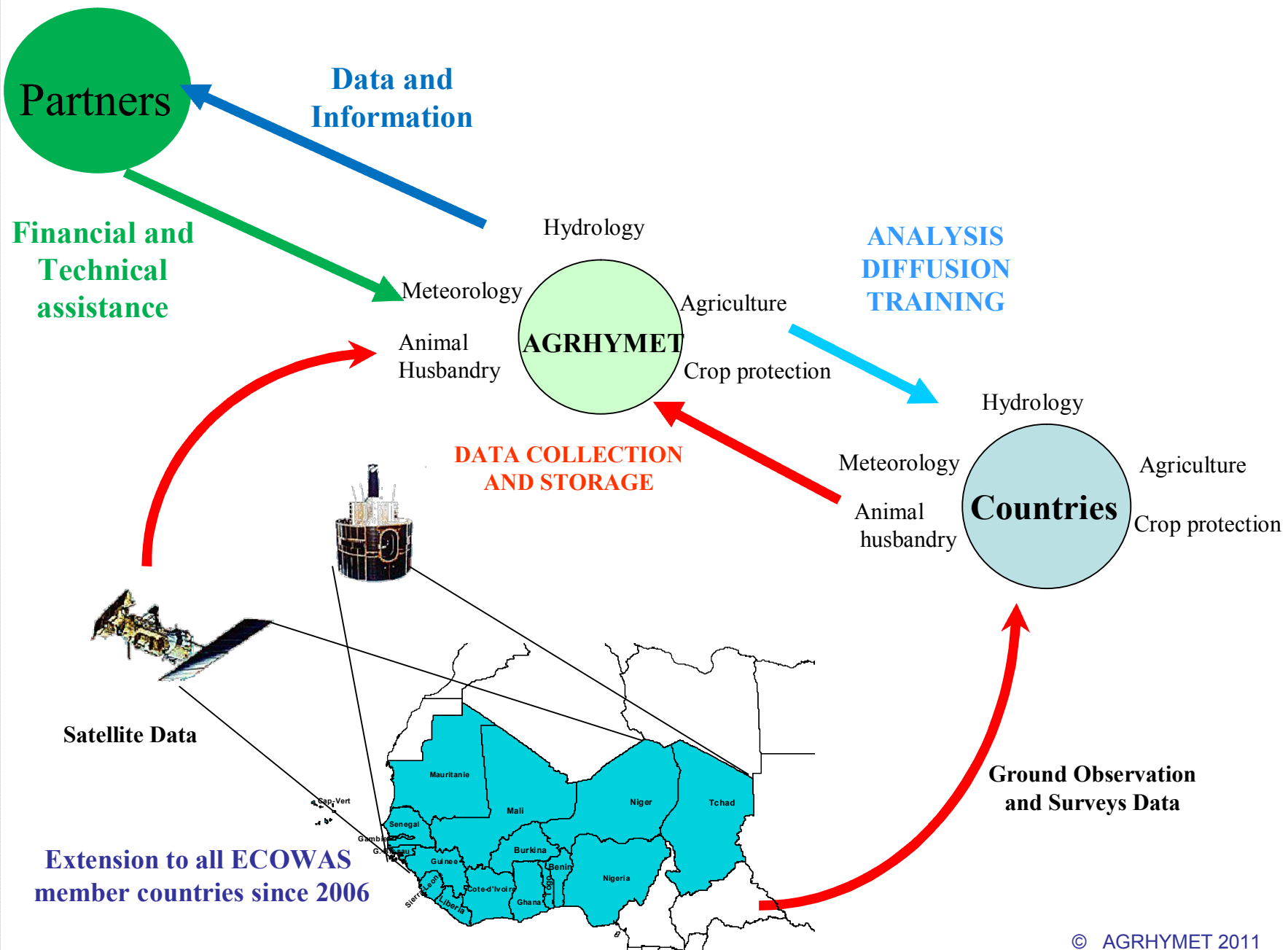
2. Improvement of methodologies and tools

- Crop monitoring,
- Pastoral monitoring;
- Agricultural statistics
- Food security vulnerability assessment
- Seasonal forecasts (hydrological)



Introduction : The AGRHYMET Operating scheme

www.agrhymet.ne





National AGRHYMET Components (NACs)

www.agrhymet.ne



AGRHYMET system : 1984

Composition of Partners: CILSS National Offices of Meteorology (NOMs)

Data sent by NOMs: wind, rain, temperature, humidity,

Services provided by AGRHYMET: Collection of regional data, interpretation of data,

Dissemination of information by AGRHYMET: regional bulletin, radio, phone..



Evolution of AGRHYMET system

Creation of National AGRHYMET Components (NACs)

Composition of NACs: services of agriculture, forestry, livestock, crop protection, environment and some NGOs.

Services provided by AGRHYMET:

Satellite imagery, regional information and food security, desertification....

Training in agrometeorology, hydrology, crop protection, maintenance of meteorological equipment, etc.



Dissemination of information by NACs: national radio, News, bulletins, etc.

Use of Information sent by AGRHYMET : forecasting of sowing date, harverst, grasshoppers invasion, etc

These NACs constitue Multidisciplinary Working Groups (MWGs) that are currently being extended to other ECOWAS countries



Future Prospects

Continued capacity building

New degree programs

Refresher courses / training the staff members of national technical services

Equipment and instrumentation (measuring instruments and microcomputing)

Expansion to ECOWAS (countries located along the Gulf of Guinea)

Adaptation/harmonisation of existing crop monitoring methods and tools,

Creation, updating and securing the Regional Database

Capacity building of technical services

AGRHYMET is involved in various on-going initiatives

- AMMA (African Monsoon Multidisciplinary Analyses)
- AMESD (African Monitoring of Environment for Sustainable Development)
- Etc....



Partnerships

- **Technical**

- **National technical services**

- *Meteorology, hydrology, agric. statistics, crop protection, agric. research, etc....*

- **Regional**

- *River Basin Authorities, ACMAD, CORAF/WECARD, etc*

- **International**

- *FAO, WMO, WFP, FEWSNET, USGS, IRI, CIRAD, IRD, JRC, VITO, ICRISAT etc*

- **Financial**

- CILSS countries, EU, USAID, AfDB, ECOWAS, France, Canada, Danish



Thank you for your Attention !