



Seminar on monitoring and evaluation of water and sanitation services in
rural areas and small towns in West Africa
April 7-9, 2014

Experience of West Africa in the ICT use in monitoring and regulating piped water schemes in growth rural centers and small towns

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Growing need in West Africa to monitor piped water schemes in small towns

1. Small towns ranging from 2,000 to 10,000 inhabitants
2. Piped water schemes in small towns mainly operated by small scale private operators with poor operational performances (NRW, collection ratio), high water tariffs and poor coverage
3. Weak accountability framework (no reports, no regulation)

Problems & Solutions

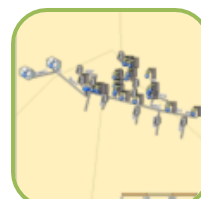
Problems

**Lack of
knowledge
about
assets/
management**

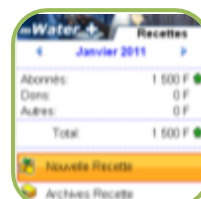
**No
reporting**

How *mWater* can help

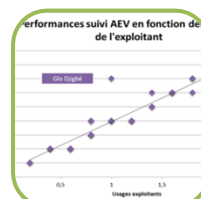
**Inventory &
Mapping**



**Technical &
Financial
Assistance**



**Monitoring
&
Regulation
Assistance**



- Water point mapping



- Asset inventory
- Network recovery plans

- Invoicing
- Accounting



- Monitoring the expenses

- Analyzing the performance



mWater, a mobile to web platform piloted in Senegal, Mali, Benin and Niger in 252 small towns

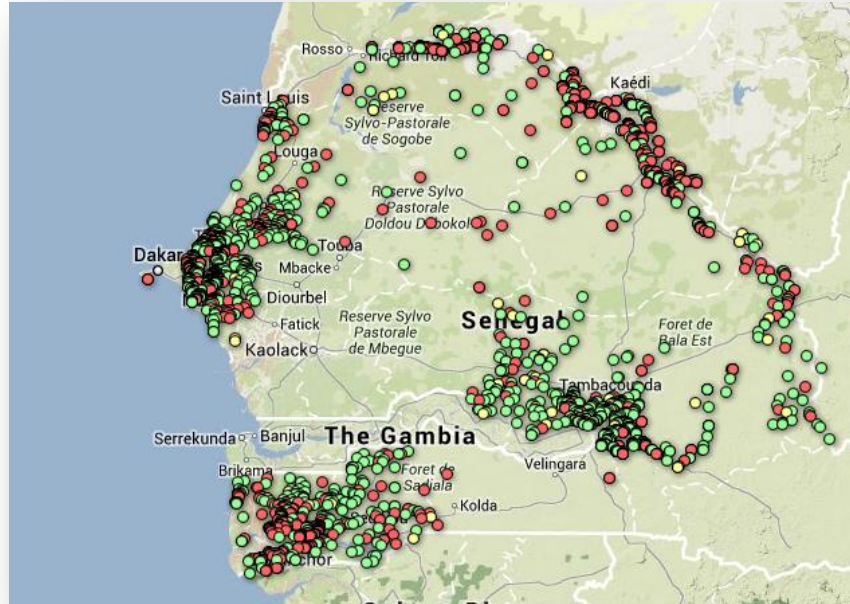
COUNTRY	Rural population	Rural access rate in 2011
SENEGAL	7,278	59%
MALI	9,029	53%
BENIN	5,187	69%
NIGER	9,159	39%
TOTAL	30,653	53%

Country	Total water supply schemes	Water schemes e-monitored	%
Senegal	1,200	84	7%
Mali	600	55	9%
Niger	963	62	6%
Benin	360	51	14%
Total	3,123	252	6.4%

3 layers of services developed

SERVICE LAYER	FUNCTIONS
Inventory and cartography service	Data can be captured via mobile phones and incorporated into the system to describe infrastructure and water points.
Technical and financial management of a water supply scheme	Water operators manage technical and financial operations of their networks and improve customers management.
Regulation	mWater supports regulators to monitor the performance of water schemes

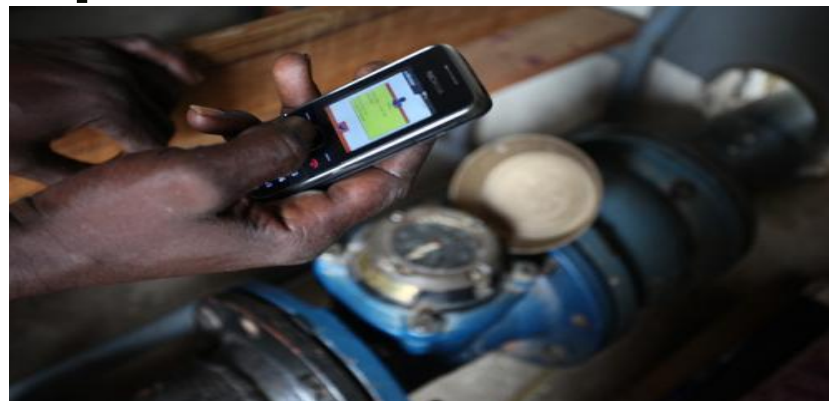
Inventory services: In Senegal, 28,000 water points geo-referenced (70% of existing small piped water schemes)



Advantages of electronic inventory

- **Faster referencing of each water point (3 to 5 minutes per point)**
- **Transfer and immediate integration of data into the platform**
- **30% reduction of data collection costs**

Technical & financial management: Water providers to generate automatic reports



3 SMS per week

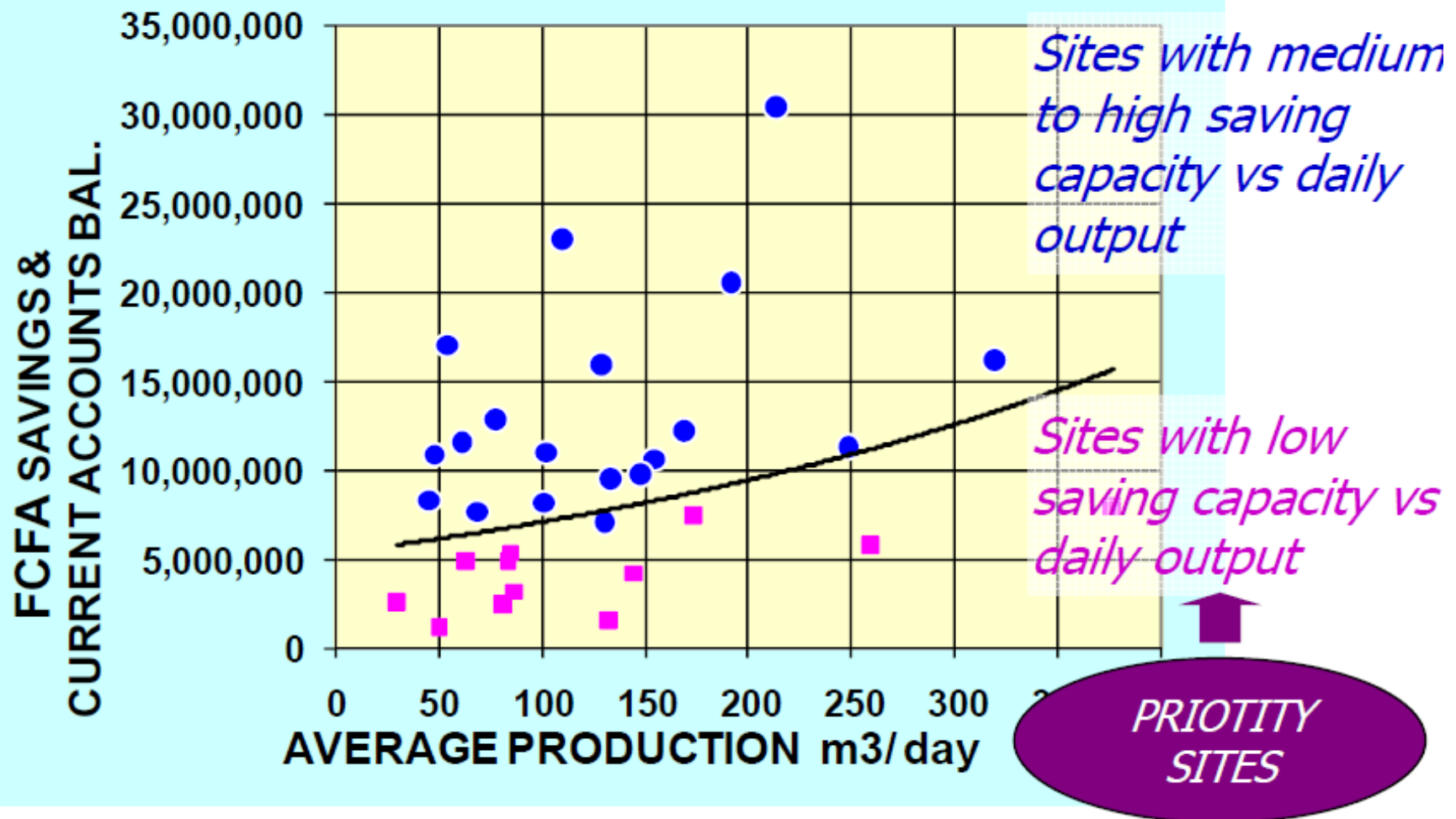
1. Reading of bulk water production meter(s)
2. Balance of current and savings accounts
3. Nb. of malfunction days for the month



mWater monthly report



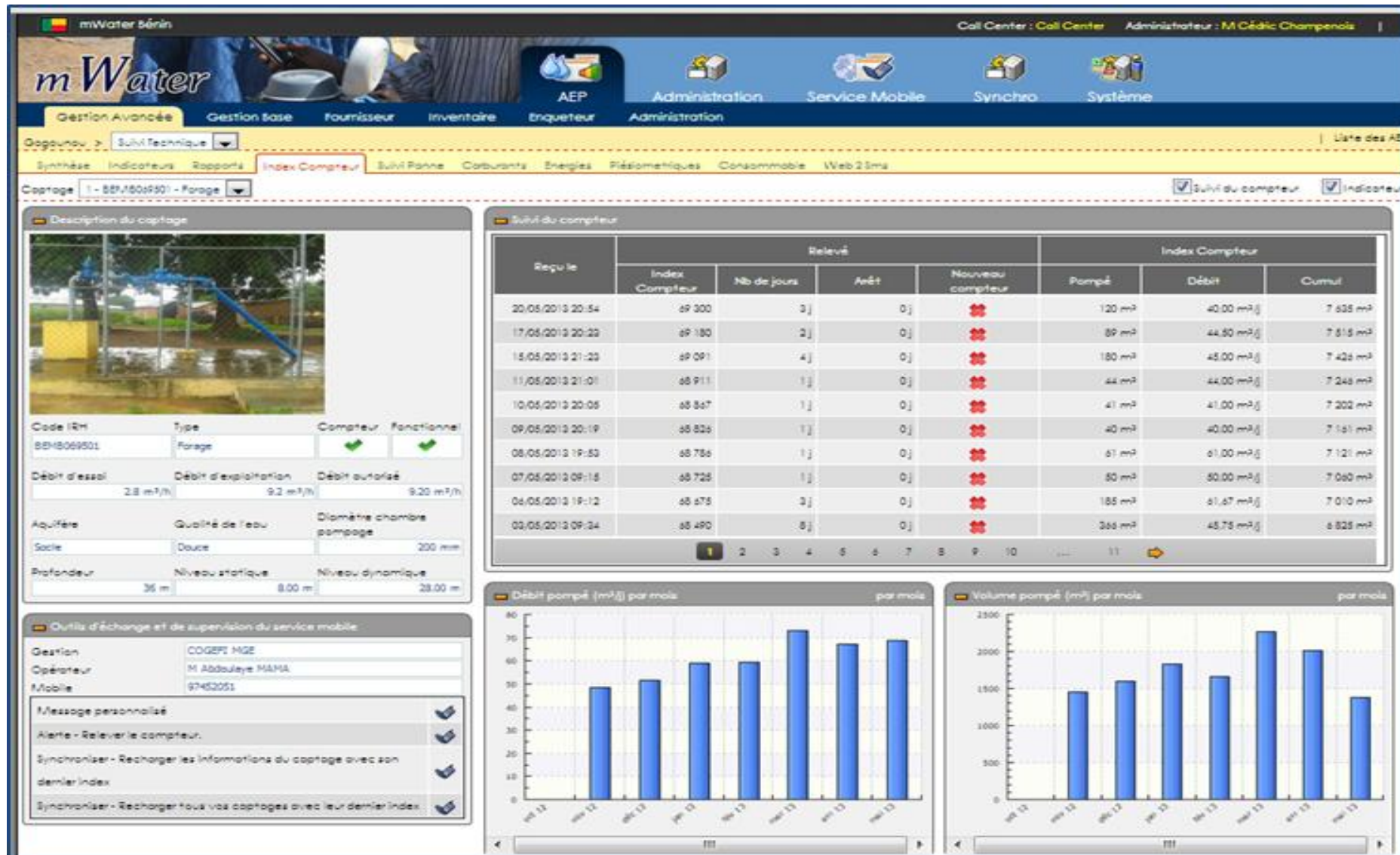
Regulation: in Senegal, benchmarking of ASUFOR's performances



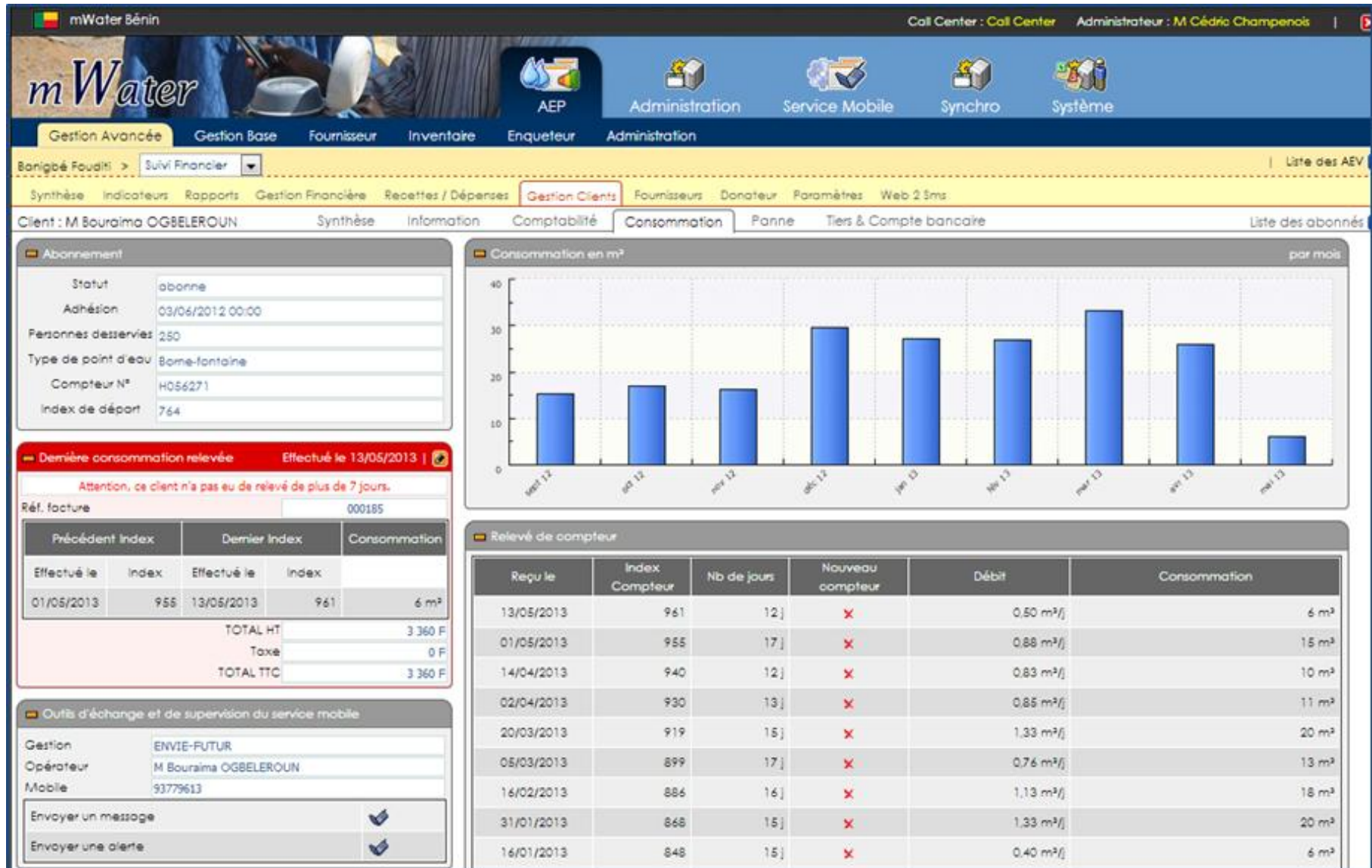


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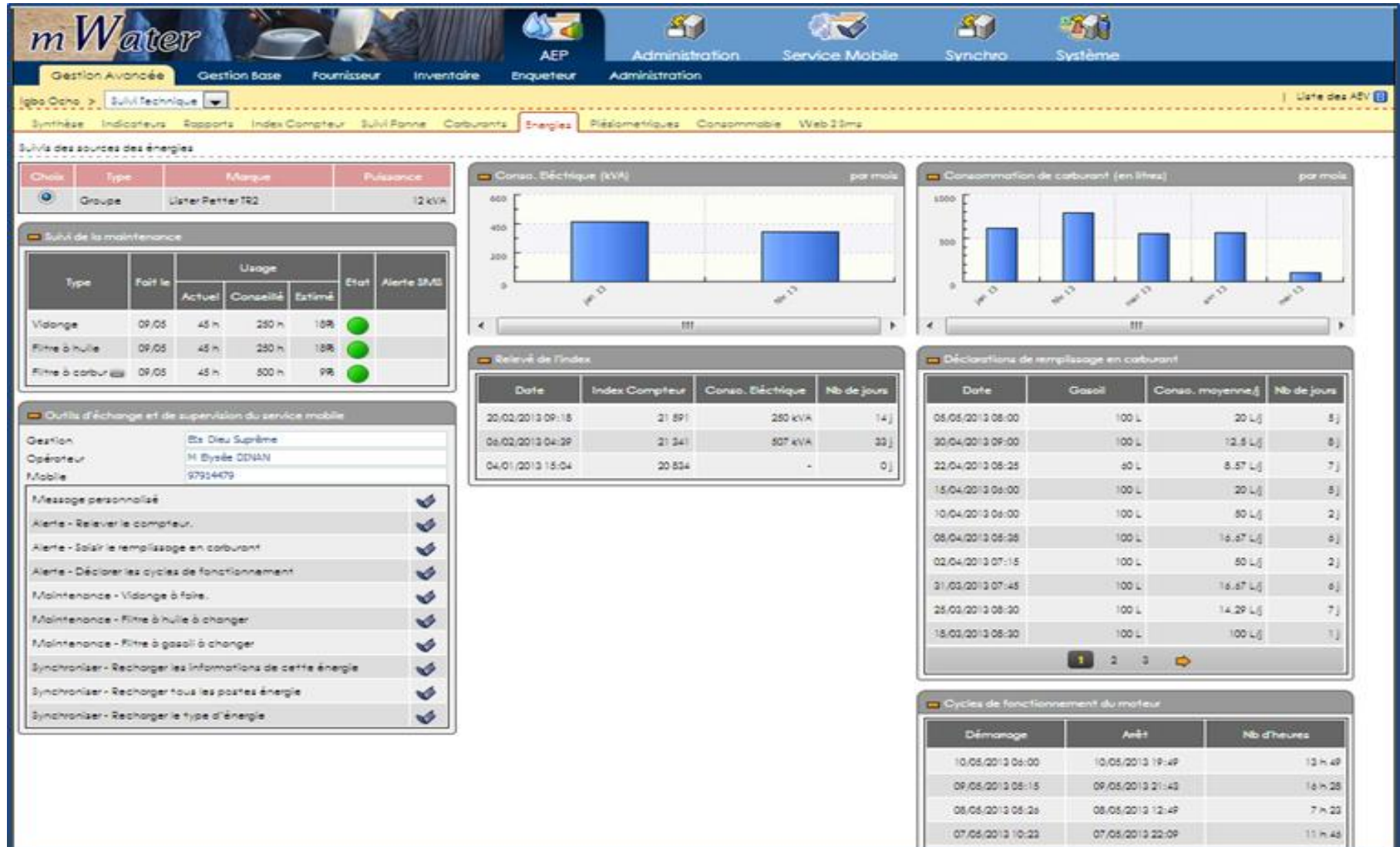
Monitoring of water production in Benin



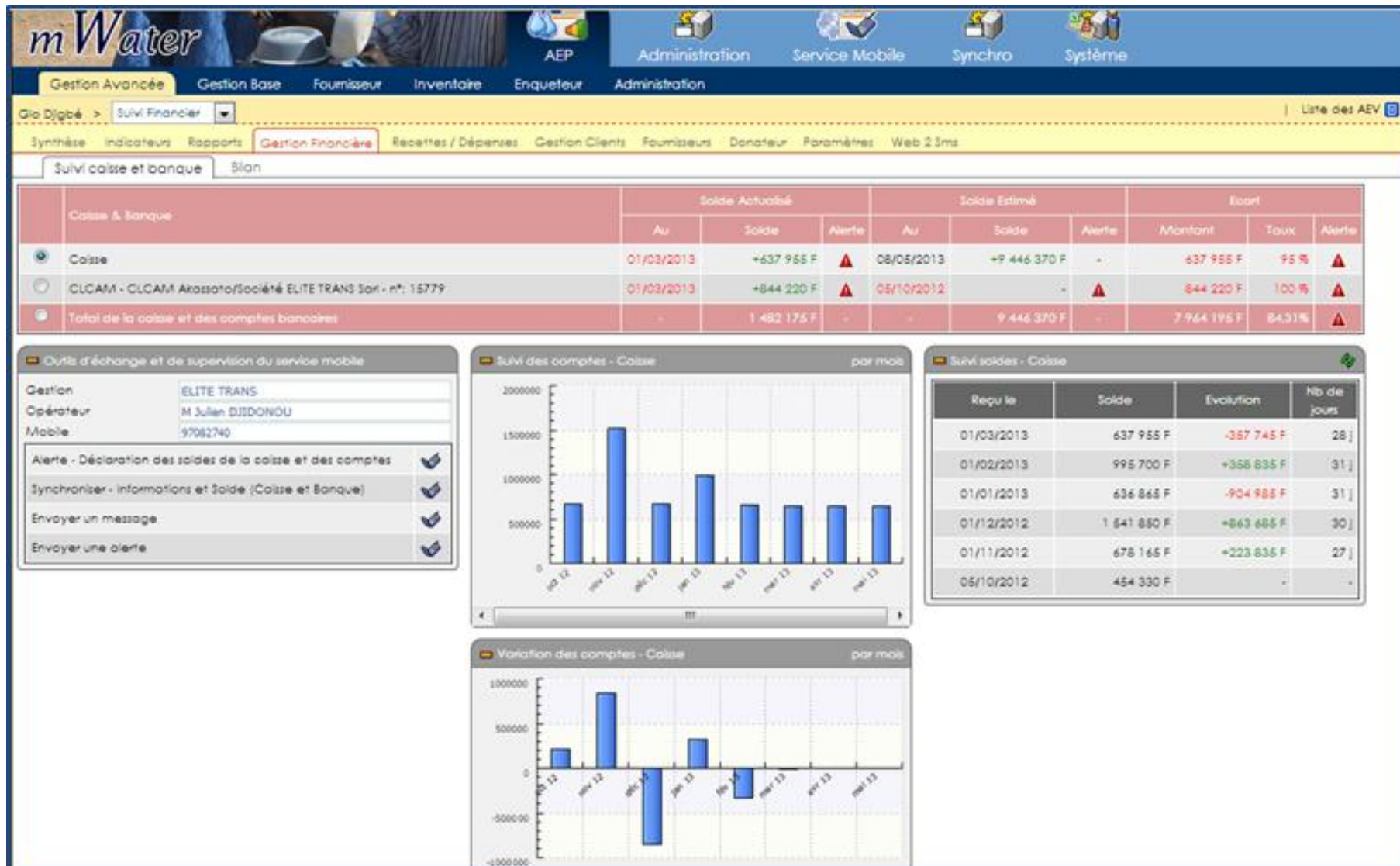
Monitoring of water distribution in Benin



Monitoring of technical operations in Benin



Monitoring of financial operations in Benin



In Benin, private operators can better manage their expenses



Challenges to address to move from pilot to at scale use of ICT tools



1. Link the ICT platform to the national regulation, monitoring and evaluation systems
2. Encourage sustainable business model for financing ICT services through economy generated without water tariffs adjustment
3. Develop capacity building program and local Business Development Services (Maintenance, Training, access to finance) to make ICT services accessible to service providers
4. Use the ICT platform as governance tool to encourage accountability, performances and extension of services to the poor (use subsidies allocation to reward performing service providers)

THANK YOU

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