

BRL, CACG & SCP, THE FRENCH MODEL OF SOCIÉTÉS D'AMÉNAGEMENT RÉGIONAL











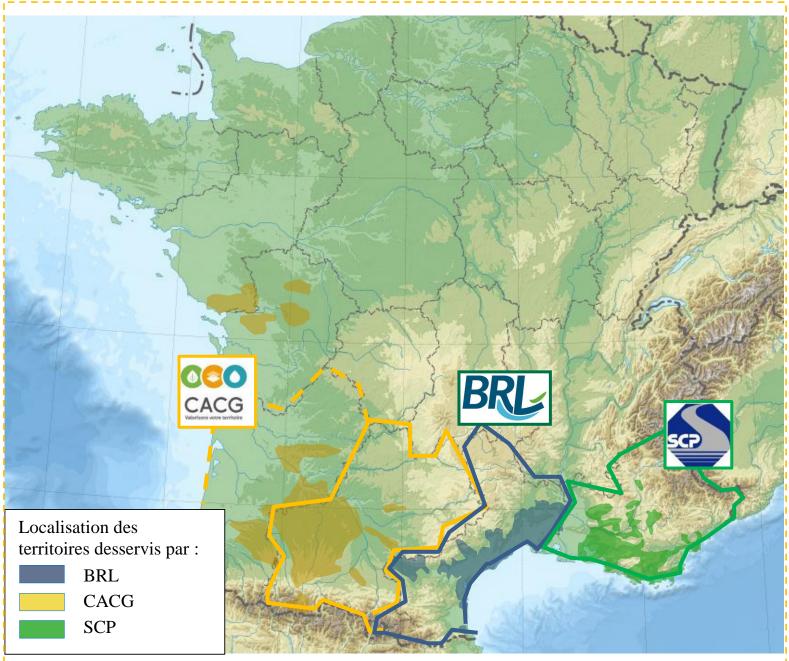


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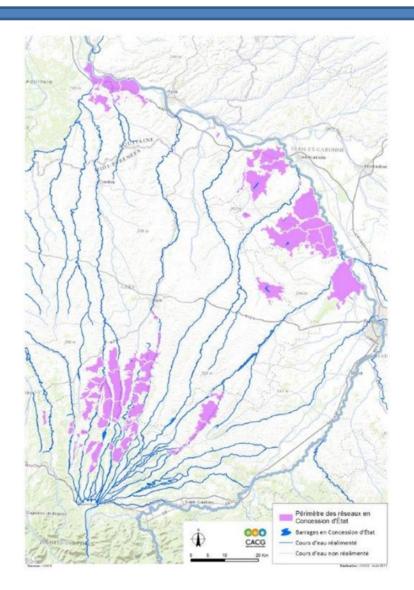
1 - Contexte Post 1945

Part 1 – The Post WWII context



South West in 1950

- Rivers are not supplied by the mountains
- Poor water management (Irrigation and Drainage),
- Fragmented land structures
- Low efficient value chains





Languedoc-Roussillon in 1950

Statements

- Agriculture in crisis (viticulture)
- Very low industrialization and crisis (mining, textiles)
- Rural exodus

Potential

- Natural potential (climate-soil) for diversified agriculture (fruits, vegetables)
- Touristic Potentiel (Sea, Sun...)

Drivers of development

- Creation of new towns to secure mass tourism
- Creation and provision of water resources
- Road access improvement



Provence in 1950

Statements

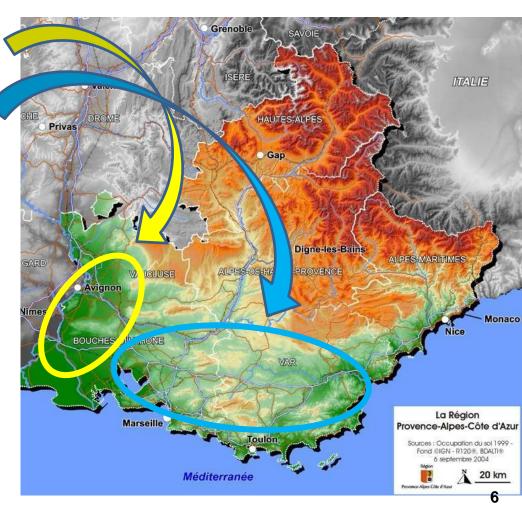
- Numerous ancient irrigation canals in the west part, no infrastructure elsewhere
- Conflict of uses

Potentials

- Abundant water resources in the north (Alps)
- Agricultural and tourism potential

Opportunities

Major development program
 Durance-Verdon : dams,
 regulation and hydropower





Need for new water resources and transfer infrastructures

- « Sociétés d'Aménagement Régional » as a tool to allow and sustain development of
 - diversified and intensive agriculture
 - industrial network
 - urban developement and increase of population
 - Tourism expansion











2 – Les principes fondateurs

Part 2 - The basic principles



SAR creation's principles

- The statutes of SAR: a legal, financial and technical tool
- A public service concession for 75 years
- Water rights
- Two main missions:
 - Development of water storage, transfer and distribution infrastructure
 - Support to irrigated agriculture development













Two basic intentions

- Creation of a company with local governance
- Entrusting it with an integrated mandate covering the design, implementation and future management of the infrastructure over a long period of time

Two basic principles

- Creation of a "Société d'Economie Mixte" (a publicowned and private-managed company), with a majority of public shareholding subject to special State control
- A State concession agreement (concession-granting decree) for managing the development at the scale of the region



- The concession: long term mandate (75 years) to allow deferred economic returns on investment:
 - The Contractor invests and operates: acts as the Owner
 - The Contractor remuneration is derived from the users (water tariffs)
 - The Contractor bears investment and operation risks
 - The Contractor ensures the renewal of investment











3 - Les grands cycles

Part 3 - The main phases



1955 - 1985 : 30 years of development

- The SAR, at regional level :
 - plan, design and carry out works and hydraulic multi-purpose infrastructure,
 - mobilize the necessary funding,
 - are involved in land restructuring, research and technical support to producers, post harvest and marketing processes for agricultural products.
- Since the start, parallel development of agricultural, urban and industrial uses.
- From the 70's, acting as consulting compagnies abroad













1985 - 2000 : different dynamics

- The end of the initial construction dynamic
 - Reduced investment, the main development areas are completed
 - Support for farmers is no longer necessary
- Diversification (Engineering enhancement, other activities,...)
- Reduction of State financial support :
 - Financial gaps / Compensation depends on commitment of local authorities
 - Test for local governance.











The SAR of 21th century

- BRL and SCP Concession are transferred to Region Languedoc-Roussillon and Provence-Alpes-Côte d'Azur
- New big construction projects:
 - BRL: Aqua Domitia
 - CACG: Poitevin lowlands
 - SCP: Verdon Saint-Cassien transfer
- Continuation of engineering development abroad and in France













Facilities operated by BRL

100 000 hectares command area

- 3 main licensed intakes Rhone,
 Orb and Ganguise Dam,
- 100 km of canals,
- Over 5 000 km of pressure pipes,
- 70 pumping stations,
- 6 drinking water treatment plants.

Farmers:

- 4 000 farms
- 60 to 80 million m3 distributed.

Consumers:

- Drinking Water for 700 000 people
- Garden watering: 6 000 customers and 6 to 8 million m3 distributed.





SCP's infrastructure and users



Reserves: 250 Mm3

140 Mm3 annual volumes:

30 Mm³ Irrigated agriculture (80 000 ha)

Urban water supply

45Mm³ (110 cities – 2 million people)

40 Mm³ Industries (400 clients)

Rural domestic & 25 Mm³ gardens (45 000 clients)

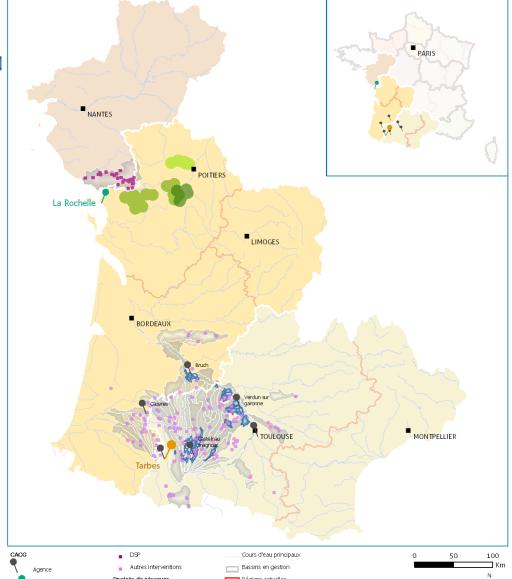
- Canals (70km) ■ Galleries (140 km) Operation centers
- Main pipes and distribution (5000 km)



CACG

- 80 dams/ 250 Mm3
- 55 schemes
- 500 Mm3 yearly managed
- 54% for environment
- 150 000 ha command area
- 10 000 users
- Urban water for 200.000 people





Nouvelles régions

Midi-Pyrénées Languedoc

Poitou-Charentes Limousin

Sources: IGN@2014, CACG

Projection: RGF - Lamber 23

Réalisation : CACG - Septembre 2015

Dive Bouleure Clain Amont

en concession état

Périmètre des réseaux d'irrigation

Filiale CA17

Concession

Barrages et retenues en gestion



4 – Les clés du succès

Part 4 - The key reasons for success



Keys to success

- Long term territorial vision, including socio-economic and environmental challenges
- 2. Public and decentralized shareholding
- 3. Private law statutes, operating autonomy
- 4. Integration of all skills, from design to operation
- 5. Technical options adapted to the territories
- 6. Multi-purpose infrastructure (agricultural, urban, industrial, environment)
- 7. Tariff policy and commercial management
- 8. Coverage of expenses, costs/incomes balanced
- 9. Shared funding of investments
- 10. Cover all risks of water service



Long term vision for local development

- Territory as a geographical, political and economic entity.
- 75 years concession
- Since the start, adress all issues from socio-economic (supply different uses) to environmental (sustainable management of water resources)







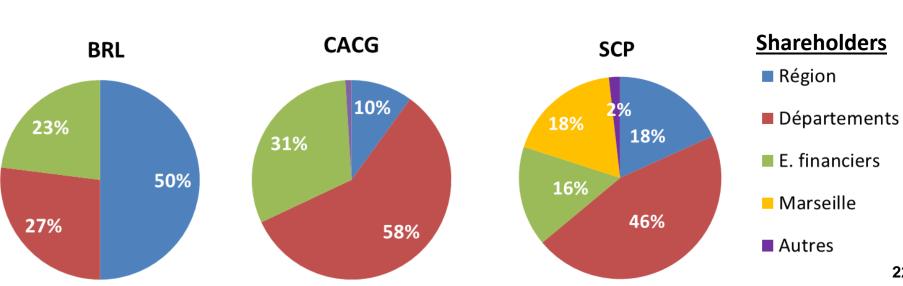






Public shareholding and decentralized governance

- Local authorities involved in governance and financing
 - Board members
 - Concessions owners (BRL et SCP)
 - Drivers of territorial project



ICID2015 26th ERC & 66th IEC

Private Statute

- Private type management
- Private accountancy and tax liablity
- Autonomus management
- Obligation to ensure constant balance between charges and income
- Can spin some activities







Integration of all skills, from design to O&M

A single frame for all skills:

- Owner: hydraulic infrastructure development
- O&M of complex hydraulic systems,
- Water structures, environement and local development Engineering,
- Support to farmers for irrigation and agriculture improvement











Technical specificities

- Technical development standards :
 - Adapted to the territories
 - Including the O&M constraints
- BRL:
 - Flatland near a large river (Rhône): pumping and large canals + pipe networks
- CACG:
 - Foothill territory with numerous watercourses: dams+ river supply + pipe networks and water users associations
- SCP:
 - Uneven territory : large dam + gravitary transfer infrastructure + pipe networks





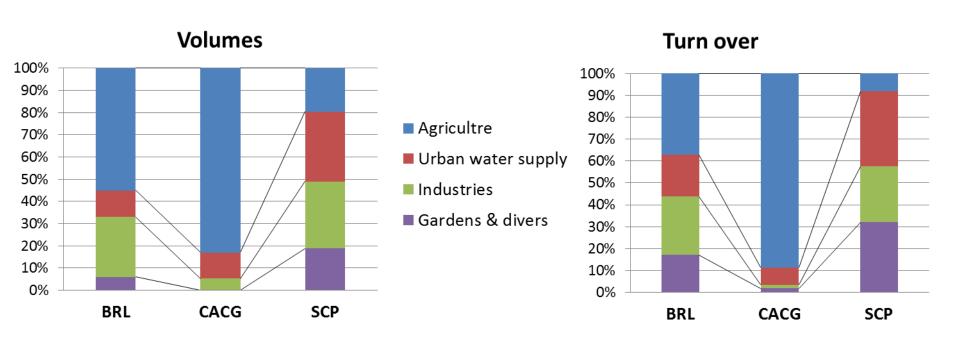






Multipurpose infrastructures

 Multipurpose is an asset to financial balance and sustainability – Very different users structures



Tariff policy



- Transparent contracting between contractor and final user
- Solidarity between uses and territories
- Tariff adapted to every use:
 - Driven by « economic reality »: average cost of m3 increase as consumption decrease,
 - Adapted to every use: agriculture, urban water supply, industries, gardens, ...



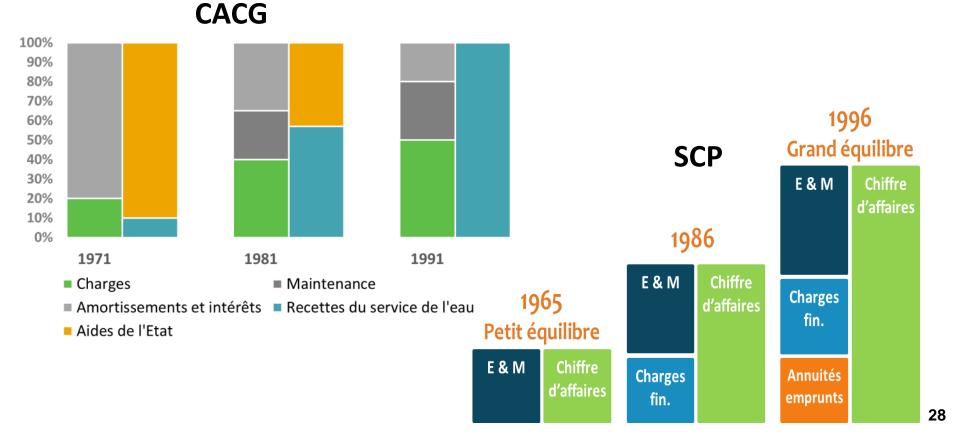






Balance between charges and income

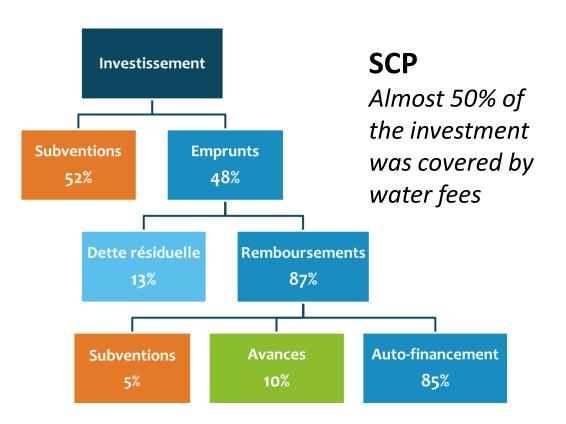
All charges are covered by water fees after 30 years





Investment shared funding

- Between public funding and users
 - Public funding (Europe, government, local authorities)
 - Bank loans and self funding covered by water fees









Cover all risks of water service

All is implemented in house

- Design and construction with development of all necessary skills
- Operations of infrastructure, water management
- Maintenance of facilities
- Business development : invoices and water fees collection







5 – Des spécificités (contexte, opportunités, choix)

Part 5 – Specificities: context, opportunities and choices





BRL Holding du groupe Spin of activities Gestion du patrimoine concédé Maîtrise d'ouvrage d'Agua Domitia BRL **PREDICT** BRL BRL BRL **Exploitation** Ingénierie Services Madagascar Espaces Naturels Sociéte **Exploitation** Aide Bureau d'études d'ouvrages d'ingénierie dans le domaine Production de à la gestion hydrauliques, internationale de l'eau, de végétaux, des gestion de spécialisée création. l'environnement inondations contrats d'eau. dans l'eau. aménagement et de conseil et vente l'environnement et entretien l'aménagement de matériel et l'aménagement d'espaces verts d'irrigation

 Operations and maintenance export : Morocco, Ethiopia





- Storage capacity below average needs
- Use of water courses as water conveyance system
- Water management: consultation, accountability, technology
- WUA development instead of concession schemes
- State concession + numerous public services delegation contracts

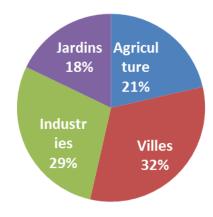






SCP specificities

- Sharing of water rights
- Balanced multi-use infrastructure among agriculture, urban supply and industry which triggers financial sustainability



Huge rehabilitation programs

