



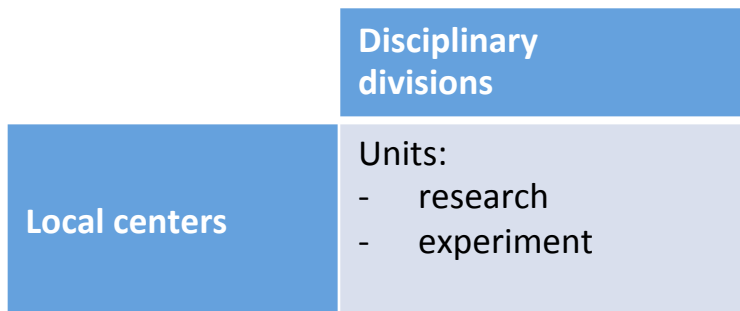
ORGANIC FARMING RESEARCH AT INRA

... DRÔME & BIOVALLÉE



THE TOOLS AT INRA

- ❖ Research units at the crossroads of two dimensions

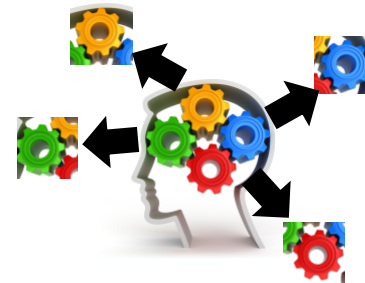


❖ Large programs

- ❖ Meta-programs (8)
 - ❖ **Animal & crop health**
 - ❖ **Genomic selection**
 - ❖ **Ecosystem services**
 - ❖ **Climate change**
 - ❖ **Food security and diets**
 - ❖ **Meta-omic of microbial ecosystems**
- ❖ Other tools
 - ❖ PSDR (“For and About Regional Development”)
 - ❖ **CIAB (Organic Farming internal committee)**

INRA'S META-PROGRAMS (SINCE 2011)

- ❖ Organic Farming not explicit in most position manifests
- ❖ Interactions of unequal strength
- ❖ Some convergences identified
 - ❖ Systemic thinking
 - ❖ Organic Farming as a comparison anchor
 - ❖ Organic Farming as a learning case (prototype ?)
- ❖ A dynamics at work (but needs efforts !)
- ❖ But split views (1 per meta-program)
 - ❖ Health
 - ❖ Services & benefits
 - ❖ ...



CIAB: INTERNAL COMMITTEE ON OF

A TARGETED PROGRAM & INRA'S STRATEGY



- ❖ OF: a source for methodological changes
 - ❖ Interdisciplinary research
 - ❖ Systemic research
 - ❖ Systems experimentation
 - ❖ Combining experimental sites & farm networks
- ❖ OF: object for finalized research
 - ❖ Partnership (INRA-ITAB par ex.)
 - ❖ Demonstration (Experimental units)
 - ❖ Valorization & dissemination
- ❖ 2000, 2004, 2009, 2014 : 4 targeted support programs

INRA'S SUPPORT TO OF OVER THE PAST...

Project call topics	Supporting institution	Year
'open'	INRA	2000
'open'	INRA	2001
Grapevine flavescence dorée	INRA-ACTA	2001
Copper use reduction		
Seeds & seedlings		
Continuing Flavescence, copper & seeds	INRA-ACTA	2003
Fertilization in OF		
Interactions genotype x environment	INRA	2004
Grapevine wood diseases		
Herbivory parasitism control		
Wheat quality (protein, bread making)	INRA-ACTA-ACTIA	2004
Converting to OF dynamics		
Environmental impact of OF		
OF performances	INRA	2009
Economic development of OF		
OF performance redesign	INRA	2014
'Hot' problems		

Increasing systemic & multidisciplinary dimensions

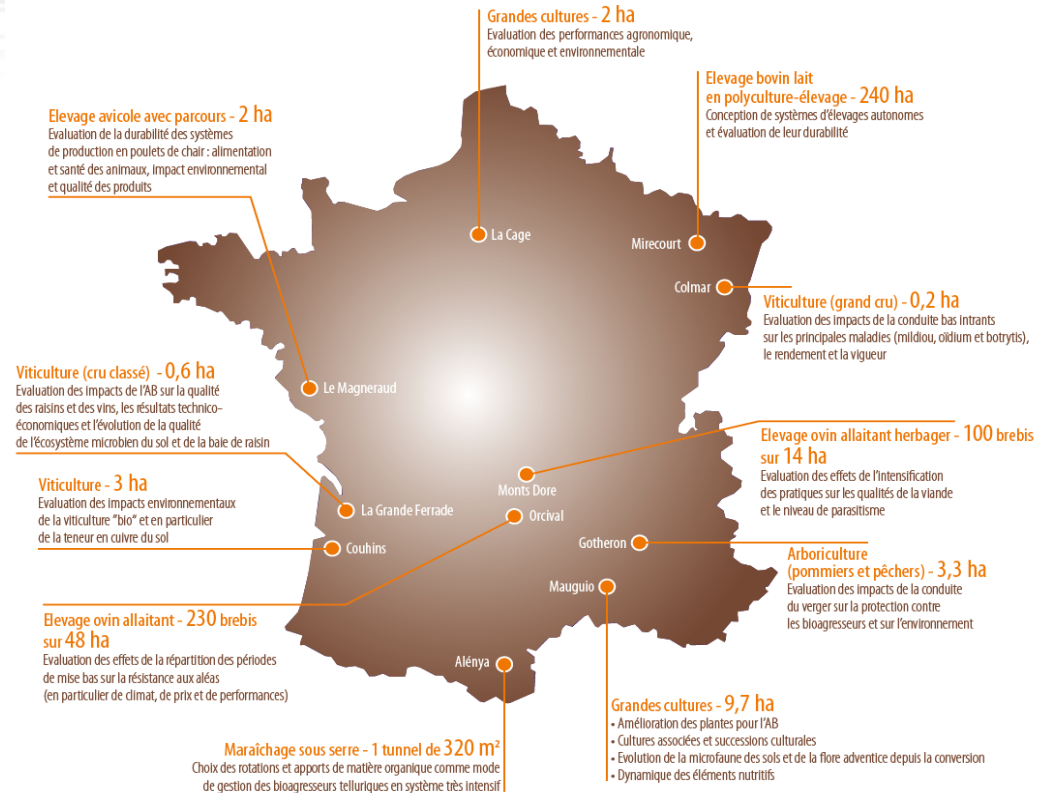
And also:

- Workshops,
- Symposiums,
- Books,
- Contributions to technical meetings,
- Web-site

2000-2012:

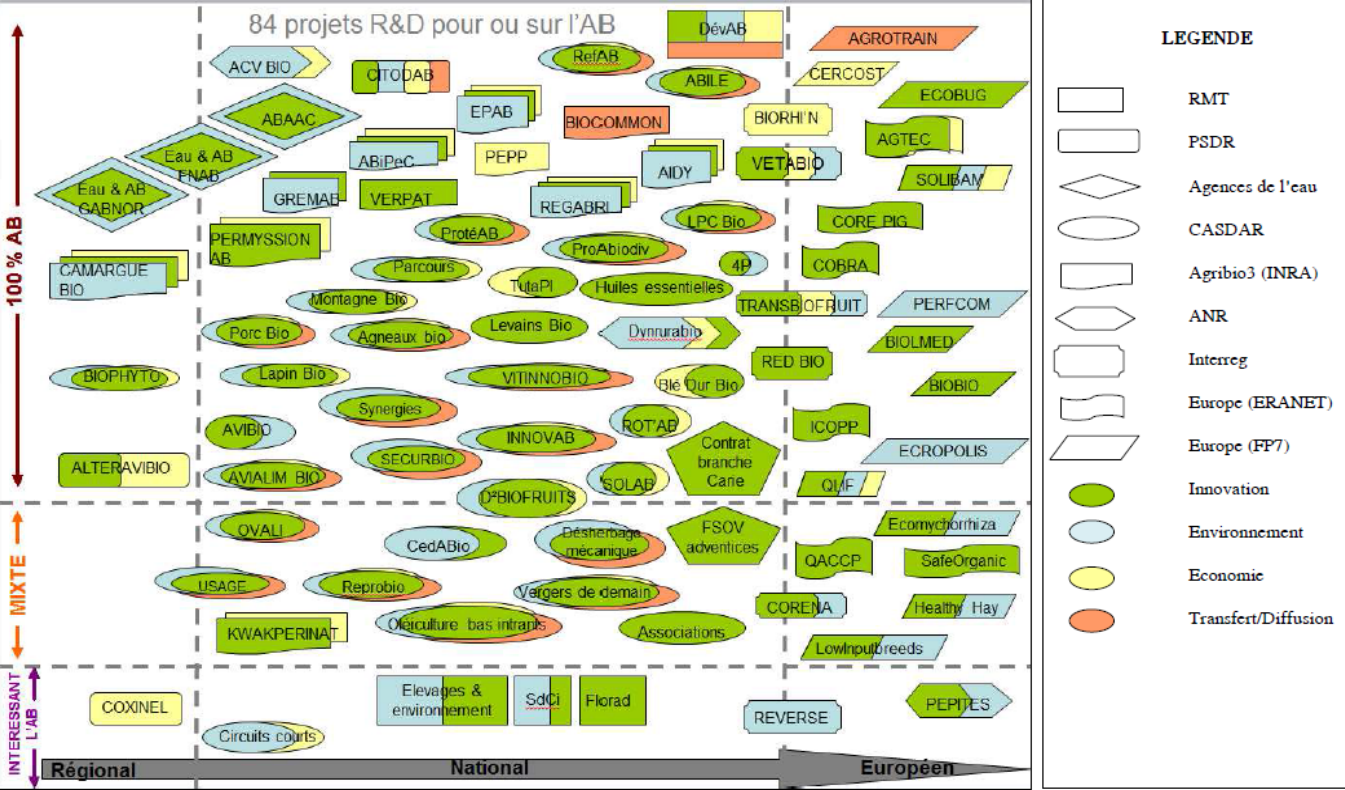
- 40 projects
- 258 persons
- 70 units (UR, UMR, UE)

EXPERIMENTAL UNITS IN/WITH ORGANIC FARMING



CARTOGRAPHIE DES RMT ET PROJETS DE R&D POUR ET SUR L'AB

Cette carte est réalisée dans le but de montrer les thématiques communes entre les projets issus de différents appels à projets et les liens qui pourraient être faits entre ces différents projets. Sont reprises ici les 4 thématiques du RMT DévAB : technique, environnement, économie et transfert de connaissances.



Main INRA divisions with OF implications:

Production divisions: PHASE, SA, E&A, SAD, SAE2

Downstream divisions: CEPIA

SAD IMPLICATION ON ORGANIC FARMING

- ❖ Research & Experimental units
 - ❖ Innovation (Montpellier)
 - ❖ OF rice in Camargue & regional development
 - ❖ OF grapevine production
 - ❖ Innovative marketing strategies
 - ❖ SAD-APT
 - ❖ Conversion to OF
 - ❖ OF market gardening & city food supply
 - ❖ Alternative agricultural models: OF, agroforestry...
 - ❖ ASTER (Mirecourt)
 - ❖ Autonomy in milk production (with/without grains)
 - ❖ Alenya
 - ❖ Protected vegetable production, interactions with marketing options
 - ❖ Ecodéveloppement



ECODEVELOPMENT PROJECT

Ecological transitions:

- ❖ Understanding how they take place
 - ❖ at different temporal and spatial *scales*
 - ❖ identifying key determinants
 - ❖ Cases: horticulture transitions to OF
- ❖ Understanding their conditions
 - ❖ socio-economic determinants
 - ❖ Effects of public policies
- ❖ BioVallée: illustrative regional case
 - ❖ One public goal, strategies & support policies
 - ❖ Global ecologization (incl. OF)



ECODEVELOPMENT IMPLICATION ON BIOVALLÉE & DRÔME

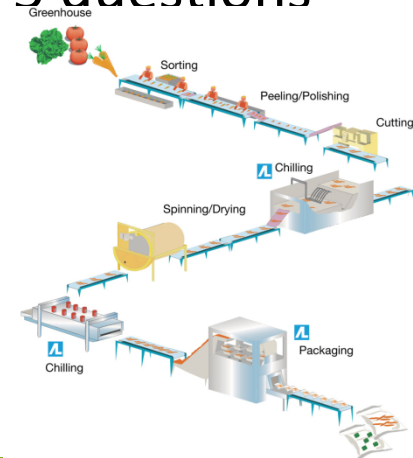
- ❖ Scientific board
- ❖ Location to study:
 - ❖ Lock-in to regional organic production development & agrifood system transition
 - ❖ Role of civil society,
 - ❖ Convergence of interests between conv. & org. Farmers
 - ❖ Public policy into play



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ECODEVELOPMENT IMPLICATION ON BIOVALLÉE & DRÔME

- ❖ Scientific board
- ❖ Location to study:
 - ❖ Lock-in organic production
 - ❖ OF persistence within the agri-food chain: 5 questions
 - ❖ Quantities available
 - ❖ Mixity within the chain
 - ❖ Economic efficiency of industrial tools
 - ❖ Farmers-industry contracts
 - ❖ Agri-food chain structure



ECODEVELOPMENT IMPLICATION ON BIOVALLÉE & DRÔME

❖ Scientific board

❖ Location to study:

- ❖ Lock-in to organic production development
- ❖ OF persistence within agri-food chain

❖ Self-test & learning during ecologization

- ❖ On-farm learning needs *technical tests*.
- ❖ What is a *technical test*?
- ❖ How do these *tests* transform into *changes*?
- ❖ Interactions with farmers, advisers... networks



ECODEVELOPMENT IMPLICATION ON BIOVALLÉE & DRÔME

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- ❖ Self-test & learning during ecologization

❖ Collective support to conversion

- ❖ How are collective networks initiated?
- ❖ How do they produce & disseminate knowledge?
- ❖ How do they impact conversions to (or back from) OF?

CONCLUSIONS

❖ Biovallée:

- ❖ A territorial case to study the multidimensionality of transitions to OF
- ❖ Local support to interact with actors
- ❖ Research in action