# **NDA France**

# **Agricultural Knowledge and Information System (AKIS)** France (short view, focus on dairy sector) Agricultural schools Farmers Health and sanitary advice Technical advice Agricultural Chambers (strategy, rules, extension) Liberal vets CIVAM-Rural Development Association (strategy) Vets from cooperatives Milk recording association (technical) GDS: sanitary quality Other: CER (Economics - accounting), Organic Associations Cooperatives (feed, fertilizers inputs...) Breeding and selection organisms Veterinarian schools Dairy companies (Milk quality) Research and developpement Advice / Continuing training Initial and continuing training

Figure 13. Dairy Agricultural Knowledge & Information System (AKIS) in France

### France has a national dairy AKIS that consists of 27 members (Figure 14):

- 11 pilot farms
- 7 advisory institutions: BTPL, Chambre d'agriculture Auvergne-Rhône-Alpes, Chambre d'agriculture de Bretagne, Chambre d'agriculture de Normandie, Chambre d'agriculture des Hauts de France, CEDAPA, FIDOCL
- 2 accountancy advisors: Inter-Afogc, CER,
- 1 agricultural educator: CEZ de Rambouillet
- 2 research teachers: ESA Angers, Institut-Agro Rennes
- 3 dairy interbranch organization: CilOuest, CNIEL, ODG Normandie
- 1 Public policy maker: DRAAF Normandie

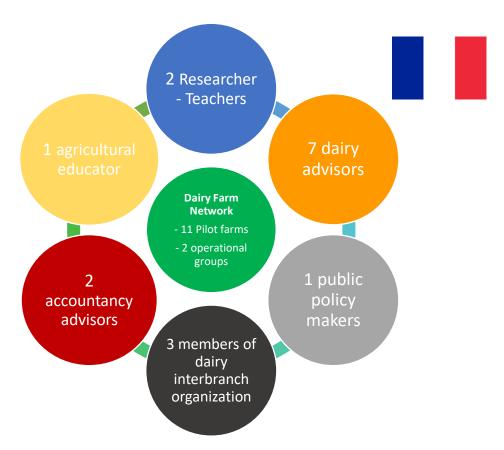


Figure 14. The regional/national dairy AKIS of France consists of 11 pilot farms and 16 non-farmer institutions each with their own expertise.

Below, each member will be described into more detail.

### Pilot farms

The 11 pilot farms are spread over France and are depicted in Figure 15.

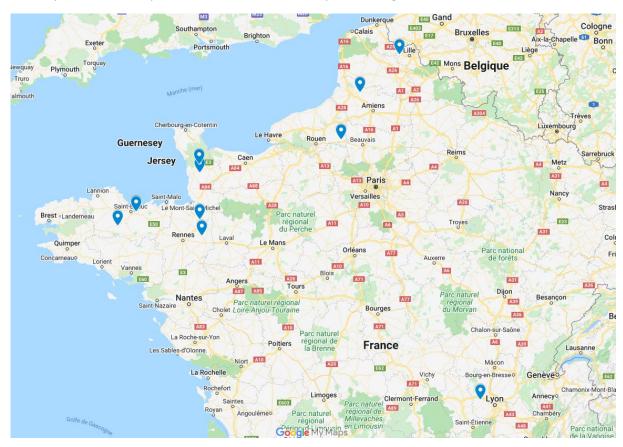


Figure 15. Location of the 11 pilot farms in France.

- 1. Maud Cloarec et Franck Le Breton GAEC Vert de Lait
  - Volume of milk production:
     205 000 l per year
  - Dairy cows:

45

Reason to include this farm:

Grass based farm (>75% of grazed grass in the ration). Reflection on climate change with implantation of hedges and permanent grassland

- 2. Valerie et Olivier Josset Gaec de Faouët
  - Volume of milk production:
     430 000 kg per year
  - Dairy cows:

73

- Other animal production:
  - poultry (direct sales)
- Reason to include this farm:
   Reflection on the transmission of the farm in the 5 or 10 coming years. Seeking for diversification of income sources and added value with direct sale of chicken.
- 3. Arnaud Senechal
  - Volume of milk production:
     700 000 kg per year

Dairy cows:

95

Other animal production:

10 steer/year

Reason to include this farm:

Curious and open-minded farmer. Recently installed on the farm.

### 4. Romain Chevrel / GAEC Douillet

– Volume of milk production:

680 000 kg per year

Dairy cows:

110

Reason to include this farm:

Curious and open-minded farmer and ready to test solution. Organic farming

### 5. Burette Jean Marc

Volume of milk production:

655 000 kg per year

Dairy cows:

70

Other:

35ha crops

Reason to include this farm:

Work a lot on strategy, work efficiency, curious and open minded.

### 6. Simon Traule

– Volume of milk production:

900 000 kg per year

Dairy cows:

90

Other:

Crops

Collective digester unit

Reason to include this farm:

Farmer recently installed. Strategy of increasing herd size

# 7. Aurélie Cauchard / EARL DE LA LANDERIE

Volume of milk production:

449 000 kg per year

Dairy cows:

93

Other:

2 gites on the farm

Reason to include this farm:

Family farm with the aim to produce milk base on grass and with Normand cow.

## 8. Vincent Delauney / GAEC de la Fromagère

Volume of milk production:

520 000 kg per year

Dairy cows:

96

Reason to include this farm:

Good entrepreneurship skills. Reflection on best practices to protect soil. Installation of his daughter on the farm

- 9. Alexandre Bertholier et Simon Berthier GAEC des deux vallées
  - Volume of milk production:

300 000 kg per year (260 000 sold to a coop, 40 000 processed and direct selling)

Dairy cows:

45

Other:

Goat production, sheep, poultry

Reason to include this farm:

Diversified farm to be economically resilient, work on the farm autonomy (forage, concentrate), work organization (exchange between farmers)

- 10. GAEC Pré en Bulles
  - Volume of milk production:

343000 kg per year

Dairy cows:

51

Other:

Cider and apple juice

Reason to include this farm:

Grass based farm (>60% of grazed grass in the ration). Reflection on climate change with implantation of hedges and diversification (cider and apple juice on direct sale)

- 11. Lycée Agricole du Pays de Bray Domaine de Merval
  - Volume of milk production:

395 000 kg per year

Dairy cows:

95

Other:

12ha orchards

cheese direct sale, cider production

Reason to include this farm:

Educational farm. Recherche of autonomy and low-cost dairy system. Added value with transformation and direct sale.

### Operational groups

### 1) CEDAPA

- Starting and end date: September 2020 September 2023
- Objective of the project: Adaptation of grazing system to climate change
- Description of activities:
  - Evaluate grazing system sustainability and resilience in a climate change context built a methodology, evaluate grazing system
  - Built up knowledge on this subject by training and exchanges.
  - Results communication
- Area: Brittany, Cotes d'Armor
- Website: https://www.cedapa.com/
- Coordinator name and contact:
   CEDAPA, Morgane COULOMBEL, 07.64.44.45.21 morgane.cedapa@orange.fr
- Partners:
  - INRAE
  - IDELE
  - Association Terres et Bocages
  - CIVAM AD 56
  - Lycée de Caulnes
- Funding Organisations:

- Réseau CIVAM
- DDTM des Côtes d'Armor
- Conseil départemental des Côtes d'Armor
- BV; agglomérations EPCI



### 2) ASAE

- Starting and end date: 01/10/2019-31/12/2021
- Objective of the project: Resilience of dairy farming
- Description of activities:
  - Work with dairy farmers on social expectations from consumers (how to communicate...)
  - Work with advisers on farmer supports about resilience (lean management, work organization, strategy...)
  - Work with teachers on student supports about strategy and system.
- Coordinator name and contact: Castellan Elisabeth, IDELE, Elisabeth.castellan@idele.fr
- Partners:
  - Chambre d'agriculture Hauts-de-France
  - TRAME
  - BTPL
- Funding Organisations:



### Non-farmer stakeholders

#### **Education:**

### 1. CEZ de Rambouillet:

Represented by Laurent Catalon:

Public institution under authority of the ministry of education and the ministry of agriculture. CEZ has several purposes: Training (young, adults, teachers), Support and experimentation for agricultural schools (technical and educational projects), farm support (dairy farm). Laurent Catalon who is involved in the R4D french NDA is specialised in animal production. <a href="http://www.bergerie-nationale.educagri.fr/">http://www.bergerie-nationale.educagri.fr/</a>

#### **Advisors:**

- 1. Chambres d'agriculture Régionales x 4: Normandie, Hauts-de-France, Bretagne, AuRA Represented by Catherine Bausson, Gwendoline Elluin, Sophie Tirard Aurore Saison Chambers of agriculture are public law institutions. Their different missions are:
  - To anticipate evolutions, to innovate and to spread knowledges.
  - To support farmers through advising and training in different areas (strategy, technics, laws...)
  - To represent the interests of farming and to collaborate with the different professional organizations.

Chambers of agriculture exist at a regional level. Four regions are represented in R4D: Normandie, Hauts-de-France, Auvergne-Rhône-Alpes and Brittany.

#### 2. CEDAPA:

Represented by Anaïs Kernaleguen / Morgane Coulombel CEDAPA is a farming association to support farmers toward grazing system through individual or collective training.

- Technical training: grazing management, animal health (alternative medicine), low level input crop management...
- Individual training: technical and economic simulation to optimize grazing system, individual support to help the transition (grazing management, feeding, herd management...)

### 3. BTPL:

Represented by Sophie Flahaut

BTPL is a union of agricultural co-operatives which provides services.

They work in different areas:

- HR and strategy: work organization, management, human relationship, lean management...
- Economy and strategy: €colait network to optimize gross margin and income, cost of production, CAP...
- Building: building conception, slurry management, ICPE, milking robot, calf building...
- Technics: cows/goat dairy cattle management, feeding management, forages, milk quality...
- International: expert mission, animation of EDF network
- Training

Sophie Flahaut who is involved in the French NDA is specialized in Human Resources (especially lean management).

### 4. FIDOCL:

Represented by Jean-Philippe Goron

Federation of cattle advising compagnies in the south-east of France. They support farmers on technical aspects (feeding, forages, building), economic aspects (gross margin, cost of production) with individual or collective training. In addition to the advising part, they collect data at farm level (milk and quality, heifers' growth, beef production...).

FIDOCL represent the network of cattle advising compagnies in the NDA.

### Financial institute:

1. CER France Finistère

Represented by Anne Bras

CER France Finistère is a compagny specialised in rural craftmanship and farms'accounting, management and strategy. They collect technical and economical results to produce formal and official accounting document. With these materials, they can discuss with farmers on their last results, key figures and numbers and to work on the coming years and strategies. That's why Anne Bras joined R4D project to have the opportunity to share their view on different strategies running on farms and to get some feedbacks from the fields and other partners.

#### **Researchers:**

- L'Institut Agro (formerly Agro campus Rennes): agricultural engineer school
  Represented by Anne-Lise Jacquot (Professor Associate of Livestock Farming System INRAE
  Bretagne Normandie, UMR Pegase)
  - The French School of Agriculture, Food, Horticultural and Landscape Sciences (L'Institut Agro Rennes-Angers) is an internal school of the National Institute of Higher Education for Agriculture, Food and the Environment, called the "Institut Agro". It is composed of 2 campuses: Rennes and Angers. The newly created Institute (2020, former name = AgroCampus Ouest) is designed to provide France with a leading, university-level institution focusing on food, agriculture and the environment. It has three main aims: to train students, conduct academic and applied research and transfer knowledge to society at large.
  - Every year, the Institute trains over 3,750 agricultural engineers, Master's and PhD students, to address the world's societal and environmental challenges though a systemic approach. It employs 210 research-lecturers, working in 36 research units. A dedicated International Team with a hands-on approach works alongside academics and researchers. L'Institut Agro Rennes-Angers conducts multidisciplinary academic and applied research in close partnership with leading research organisations and universities, and in cooperation with economic and institutional stakeholders. The joint unit research Physiology, Environment, and Genetics for the Animal and Livestock Systems (PEGASE) brings together the French National Research Institute for Agriculture, Food and Environment (INRAE) and L'Institut Agro Rennes-Angers. PEGASE conducts research on animal biology and livestock systems with the ultimate goal to improve the sustainability and the competitiveness of animal production systems.
- 2. ESA Angers: agricultural engineer school Represented by Timothée Petit
  - ESA Angers is in western France and is a multidisciplinary private Institute of Higher Education specialized in the fields of Agriculture, Agronomy, Food Science, Viticulture, Environment, Supply chain and Marketing. Timothée Petit takes part of R4D Project. With his PhD in animal sciences, he leads research and education activities, connected to the objectives of his research unit URSE (Unité de Recherche Systèmes d'élevage) which are to

produce knowledge, tools and methods to support changes in dairy farming system based on the use of grassland in forage systems.

### Farmer based organisation:

### 1. Inter-Afocg

Represented by Gabrielle Sicard

InterAfocg is based in Paris and is a French national network of several local organizations (Afocg) managed by farmers, making lifelong vocational trainings in economics (accounting, management, strategy...) for farmers and rural inhabitants. Afocg organizations aim to improve people's abilities to better understand and manage the complexity and the totality of their farms, according to their values and their goals.

Gabrielle Sicard is involved in R4D project to discuss and understand different ways to build a resilient strategy in dairy farms. She realizes different activities for its local members, in particular, she leads investigation on several topics (settlement and transmission, small farms management, work organization and time management on farms, women in agriculture, collective farming...).

### Dairy branch organization:

#### 1. CilOuest

Represented by Guillaume Bourge

CIL Ouest (Centre Interprofessionnel laitier de l'Ouest). CILOUEST is the dairy interbranch organization for two western regions of France, Bretagne and pays de la Loire. It represents the "regional" level" or the National dairy Interbranch organization CNIEL. It is gathering in the same organization the representatives of the dairy producers, of the dairy cooperatives and of the private dairy companies. CILOUEST is the place where these 3 families can discuss and decide of actions to support actions to improve the sustainability of the dairy chain in Western France. Its main actions are covering the following challenges: improving the competitiveness of both dairy production and processing; linking the dairy chains with their territories; improving milk and dairy products quality and supporting a positive and sustainable image of the dairy chain.

#### 2. CNIEL

Represented by Jennifer Huet

CNIEL is the national dairy interbranch. It is gathering in the same organization the representatives of the dairy producers, of the dairy cooperatives and of the private dairy companies. CNIEL is the place where these 3 families can discuss and decide of actions to support actions to improve the sustainability of the dairy chain in Western France. Its main actions are covering the following challenges: improving the competitiveness of both dairy production and processing; linking the dairy chains with their territories; improving milk and dairy products quality and supporting a positive and sustainable image of the dairy chain. Jennifer Huet oversees environmental and biodiversity topics for CNIEL.

#### 3. ODG Normandie

Represented by Céline PACCARY

ODG Normandie (Organisme de Gestion de Défense)

This non-profit organization is gathering the 4 Normand cheese organizations: Camembert de Normandie, Pont l'Evêque, Livarot et Neufchâtel. All these cheeses are Protected Denominations of Origins. The aim of the ODG is to gather human, technical and financial resources to promote the 4 PDO cheeses of Normandy region.

Each cheese ODG is gathering producers and processors of one specific cheese in order to promote the same product and support the quality sign, from the elaboration of the specifications to the protection of the cheese and its valorization. In the ODG Normandy each single cheese.

### **Public policy maker:**

- 1. DRAAF : Direction Régionale de l'Alimentation, l'Agriculture et la Forêt Represented by Sandrine Obled
  - In France, the Regional Department of Food, Agriculture and Forestry are decentralised services of the Ministry of Agriculture and Food whose mission is to implement national policy on food, agriculture and forestry at the regional level. Its main missions are:
  - Social and economic knowledge of rural, agricultural and forestry areas and people who are living and working there,
  - Planning and support for regional policy, mainly within the framework of the State-Region plan contract.
  - Agricultural training (especially professional agricultural colleges and high school)
  - Rural development

The DRAAF has a role of coordination, programming, control and circulation of information.

### Facilitation methods

#### What have we done?

- **1st meeting of the NDA in November 2021:** 23 participants have met together in Paris. First we spent time to know each other (a game with a picture to know each other in a funny way), then we had a presentation of R4D and discussion to identify their expectations concerning the project. We discussed about resilience (pictures activity), their needs to build more resilient system and 1st solutions connected to these needs (flipchart activity and small group discussion).
  - = Detailed program in English and French is available (with facilitation methods used)
- 2<sup>nd</sup> meeting in April 2022: 22 participants have met together in Normandy, on a Pilot Farm. We have been on the fields during this 2-days meeting to interest farmers to join us. We have visited 2 farms with different strategies to improve their resilience, and that was helpful for discussion on our topic. We had an overview on the progress of R4D project, a presentation of the other European Pilot Farms recruited and the first results of the online Survey on Dairy Farmers' needs. Then we continued to work and exchange on identifying solutions connected to specific needs on resilience in dairy farming, available tools or practices. We had discussion on Resilience at animal level (connected to another EU project "GenTORE") and a presentation of the cross-visit in Ireland in June 2022.
  - = Agenda and report on PowerPoint are available (French)

#### What was easy?

- To discuss about resilience with all NDA Members with the help of pictures and share our vision on main needs to build more resilient system.
- To invite them for a 2<sup>nd</sup> meeting on farm. This meeting was important to stimulate their interest in our project.

## What was difficult?

- To invite farmers from different regions with some distance, different expectations, different type of systems.... But they are open-minded, as expected and ready to discuss and share their opinions.
- To find farmers in all our 4 regions interested to be involved at the European level.