



# FUTURE PERSPECTIVES FOR INTERNATIONAL DAIRY EDUCATION

Successful education strategies for students, entrepreneurs and industry







# Colophon

Commission companies

Board CAH Vilentum Global Dairy Farmers

Authors

Dhr. A.M. Prins Dhr. Ir. J.E.Nolle

Information University

Name University CAH Vilentum

**University of Applied Sciences** 

kddress — De Drieslag

8251 JZ, Dronten (NL)

Website www.cahvilentum.e

kvK-number 4124

Bankaccount NL07ABNA0471215279
Contact Dhr. ir. J.E. Nolles,

nformation Global Dairy Farmers:

Name Global Dairy Farmers

9791 DM, Ten Boer (NL

Website www.globaldairyfarmers.cor

KvK-number 5281190

nkaccount NL98RAB0030637385

Contact Dhr. A.M. Prir

ram@prinsconsult.nl

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### Preface

Since the founding of CAH Vilentum\* food production plays in our university an important role because of the importance of food production worldwide. Nowadays there is also focus on sustainability, food quality and international orientation. In this developing markets CAH Vilentum currently is integrating the education of students and our applied research programs. Essential in this integration is the cooperation with business partners. Together we

can innovate, important for the ongoing success of entrepreneurs and important for state-of the-art education of our students. Therefor we are very proud that we have a good cooperation with Global Dairy Farmers, their business partners and farmers. Within this cooperation we developed a successful study program 'International Agribusiness Management'. We had worldwide many successful students in this program and worked successfully together on different research projects.

We are very satisfied with 'Future perspectives' and the hands-on guidelines. This study shows us to improve our study program and applied research in cooperation with leading companies in the dairy industry. Enjoy reading and please feel very welcome to visit us in Dronten!

Drs. Rieke de Vlieger MCM
Director Vilentum University of Applied Sciences

Dairy Farm Construction in Developing countries is on the rise as the Demand for Fresh and Safe Milk supply grows. Artex Barns Solutions is a supplier to the Global Dairy Construction and it is becoming more evident the demand for Qualified and capable Farm managers is a restriction to the success of many of these projects. Artex Barn Solutions and our Global group of Companies are able to deliver the highest quality construction however without good crops to feed the animals and without appropriate farm managers the Dairy is destined to Fail.



We endorse programs as presented by CAH Vilentum and GDF which not only provides an amazing opportunity for Young Dairy specialists to be exposed to the Global Dairy world, it also provides well needed Dairy expertise to the Developing World of Dairy farming.

John de Jonge Artex Barn Solutions

<sup>\*</sup>CAH Vilentum is a faculty of the Vilentum University Of Applied Sciences

## Summary

Due to global market, environmental and political developments, GDF, her business partners and CAH Vilentum are not sure if the current study programs and current cooperation between CAH Vilentum and GDF fulfill the needs of the industry. Goal of this study is to give insight in the possibilitie to optimize the international dairy programs of CAH Vilentum and improve the cooperation with Global Dairy Farmers and her business partners.

An analysis of the education programs from CAH Vilentum and the developments in different markets has been carried out to provide insight in the strong and weak points and the opportunities and threats. The internal analysis focuses on the different international programs for dairy industry, the role of the Dairy Triangle concept and the learning line pre-Bachelor – Bachelor – Master (Groenhorst and CAH Vilentum). The external analysis will focus in 5 regions:

1) Western Europe, 2) Eastern Europe, 3) China, 4) South East Asia and 5) America's and the role of the GDF and business partners. Both analysis provide input for the SWOT. The confrontation matrix results in the following 7 future perspectives (strategies) for future education:

- 1. Optimization of the International Agribusiness Management (AIM) program
- 2. Develop a program for advisors in line with AIM
- 3. Create a platform for e-learning
- 4. Provide short programs for (on farm) training and/ or (online) self-study
- 5. Make Education partner in turn key projects
- Develop a research program at CAH Vilentum with focus on large scale dairy farming in an international context (Global Dairy Farming)
- Give the total research agenda a face in a Professor Global Dairy Farming

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### Introduction

Global dairy markets are rapidly developing and changing due to the higher demand of safe and healthy dairy products. While countries become more developed, quality standards tend to raise and quantity of milk is not the only aspect that counts. High quality of products with low impact on environment and animal welfare become more and more standard. Also is seen that every country has its own stage of development and needs of specific labor and knowledge. For Applied Universities this means that one study program to educate young professionals for all markets does not fulfill the demand. To match the demand for good labor from different companies in education programs Global Dairy Farmers and CAH Vilentum University of Applied Sciences have developed a study program called "International Farm Manager". Currently we cooperate for more than 5 years in this program. The International Farm Manager education program resulted in better Management Traineeships for students, companies could reach students easier and finally it improves labor quality in the international Dairy Industry.

Because markets rapidly change and demand change with them, GDF, her business partners and CAH Vilentum are not sure if the current study programs and current cooperation fulfill the needs of the industry.

Goal of this study is to give insight in the possibilities to optimize the international dairy programs of CAH Vilentum and improve the cooperation with Global Dairy Farmers and her business partners.

An analysis of the education programs from CAH Vilentum and the developments in different markets provides insight in the strong and weak points and the opportunities and threats. The internal analysis focuses on the different international programs for dairy industry, the role of the Dairy Triangle concept and the learning line pre-Bachelor – Bachelor – Master (Groenhorst and CAH Vilentum). The external analysis will focus in 5 regions: 1) Western Europe, 2) Eastern Europe, 3) China, 4) South East Asia and 5) America's and the role of GDF and her business partners. Both analysis provide input for the SWOT which results in 7 future perspectives (strategies).

Chapter 1 contains a description of CAH Vilentum and Global Dairy Farmers, their mission statements and goals. Chapter 2 presents the analysis of the CAH Vilentum International education programs. Chapter 3 gives insight in the developments of the global dairy markets. Chapter 4 contains the SWOT and chapter 5 the new perspectives for better education and cooperation. The last chapter contains the conclusions of this study.

# 2. Partner description and objectives

#### 2.1 CAH Vilentum

CAH Vilentum University of Applied Sciences is a knowledge institute for agribusiness, livestock, entrepreneurship, food, horticulture, area development and innovation and more. Her two points of focus are: education and applied research.

CAH Vilentum has in total more than 2000 Dutch and international students in Associates, Bachelor and Master programs and about 200 staff members. The University is situated in the heart of the Netherlands, with locations in Dronten and Almere. This is in the center of one of the most modern food production areas in the world. The province Flevoland where CAH Vilentum is situated is a former part of the North Sea (called: polder).

Each year about 150 international students train in the English-language degree courses, offered in close co-operation with business, universities and research institutes worldwide. The international programs are extremely varied, with students from Europe, North and South America, Asia and Africa. The courses train for Bachelor and/or Masters degree and combine both theoretical and practical training.

Each year about 150-200 students join the Applied Livestock study; this is Livestock or Agricultural

Entrepreneurship. Team Sustainable Livestock and

Entrepreneurship is the largest team at CAH Vilentum and is with these numbers of students the largest Applied Livestock study in the Netherlands (2<sup>nd</sup> has about one third of these numbers).

Practice is one essential part of the main concepts in all CAH Vilentum study programs. The University uses the educational model of competency based education. CAH Vilentum teaches students and/or businessman to develop professional products. For example an optimization strategy for a 5.000 cow dairy herd or a fodder crop plan. A close cooperation with both private enterprises as well as the public sector are the basis for the cooperation, inviting professionals of external organizations to guest lectures, be involved in the assessment of students or provide input for the (re-) design of our modules.

The applied research programs are in close cooperation with private enterprises and cooperation. A part of the research is carried out on our University Farm. This University Farm has education, research and production goals. The different facilities with 250 dairy cows, 180 ha of grass, swine, poultry and sheep are excellent for education and applied research. Tractors and machinery at Aeres Practical Training Center



Figure 2.1 CAH Vilentum is situated in the center of NL

#### 2.2 Global Dairy Farmers

Global Dairy Farmers is a network with leading dairy farmers and industry partners from all over the world. They meet each other for the discussion about new strategies, innovations, policy measures, legislation and market developments.

The management of this network is done by the GDF management team. It has its own budget. Part of this budget goes into the GDF Research Fund, filled by GDF members and her Business Partners. The network achieves its targets partly by developing research projects.

The Global Dairy Farmers network consists of the following groups of participants:

- **Dairy farmers:** Focusing on entrepreneurship, innovations, globalization, being part of the (local) food chain and sustainability;
- Associated members: Advisors or representatives from institutes with an added value for the network. CAH-Vilentum is an associated member;
- Company representatives with an added value for GDF. Together they are acting in the GDF Consortium. There are specific consortia, each focusing on a region or country of interest

GDF contributes to the following results:

- Facilitating the Network Organizing interaction with leading dairy farmers
- Congresses and events Meet each other at least once a year
- E-mail newsletters 10 times a year the latest dairy news
- GDF Website www.globaldairyfarmers.com for information and developments in the dairy industry
- GDF Facebook platform for online discussions and news.
- Round Table meetings with Business Partners of GDF
- Projects on demand of its partners, such as market research, the CalFit project and others

#### Global Dairy Research:

The GDF Network is supported by Global Dairy Research (GDR). Targets of GDR are: doing studies serving the dairy sector and looking for innovations, trends and new farm systems.



#### 2.3 Objectives CAH Vilentum

The name 'Vilentum' expresses the most important characteristics form education: let talents live and flourish (in Latin: vita = life, vi (virudus) = green, lentum (talentum) = talent)

The fundament of the CAH Vilentum is the CAH Vilentum-ID(ea) in *Economy of Life* where 'life together' is the backbone of the mission. This ID(ea) is embodied in three meaningful perspectives: our goals of life, our staff of life and our environment of life. The three perspectives are related in the 'Triple Life Model' (figure 2.2) and need to work in good and close interaction together resulting in a harmful balance. This balance with sustainable food production, 'making sense' and the environment will be the success from *Economy of life*.

CAH Vilentum has the following objectives in general:

 Have a significant contribution via education and applied research for the balance between sustainable food production, 'making sense' and the environment people are living (Economy of life)

Team Sustainable Livestock and Entrepreneurship has the following goals in general:

- Providing excellent education programs for Livestock and Ag Entrepreneurship
- Contribute to applied research for farmers, companies, governments and ngo's.

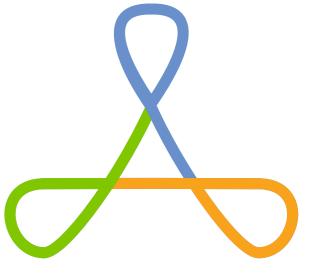


Figure 2.2 Triple Life model of CAH Vilentum

## **GDF**

#### GDF NETWORK

Club

Dairy farmers

Associated members

#### GDF NETWORK

Events

Congres Every 18 months

Events: annual on request

Consortium

GDF

Network of industry partners

Commercial and marketing

#### GDR

Global Dairy Research

With own management and research

Figure 2.3 Organogram Global Dairy Farmer

#### 2.4 Objectives Global Dairy Farmers

The organogram of GDF: see figure 2.3.

The GDF network has the following objectives in general:

- Facilitating the discussion about the impact of policy measures from different organizations as WTO, EU, FAO, and the impact on the (farm-) business of her members;
- Exchanging ideas and strategies between entrepreneurs and policy makers worldwide, on different levels (farm, region, and world);
- Discussing problems andd solutions within the network

In this way the network is acting as a kind of monitoring system for new developments on farm level and in the whole dairy sector.

The GDF consortium, the industry partners and CAH-Vilentum, have the goal to operate together in new markets and is functioning on 2 levels:

#### 1. Network

GDF Consortium as a network partner (often together with partners such as VIV, DairyXPO and others) for opening and researching existing and new markets. For example in China, India and Kazakhstan.

#### 2. Commercial

Work with partners on projects and create business in the entered markets. In different markets other partners can be attracted after permission of the consortium. For example: Cooperating with the USA-based Global Dairy Institute and the Dairy Institute of Nestlé in China GDF organizedexcellent 'After sales' by a teamwise approach of the partners.

# 3. Analysis of education programs

This chapter presents the analysis of the CAH Vilentum (International) education programs in Dairy, resulting in the strong and weak points as a basis for the SWOT analysis.

# 3.1 Analyses of current Dairy education programs

CAH Vilentum has different education programs where students are prepared for different jobs in the livestock industry; Associates Degree (AD), Bachelor (BA) and Master (MA). Some programs are in Dutch, other in English. An overview is given in figure 3.1. In all the programs students choose whether to focus on dairy or on swine/poultry. The difference between ILP en IAM is that ILP focusses more on the West-European farm type and IAM on the more large scale dairy farm.

The Dutch Bachelor programs have a specialization in the last year and the Master contains possibilities to specialize in international programs or a study abroad at a partner University. The current program contains two specific specializations in international livestock:

# 3.2 Experience on large scale dairy farming

In the early nineties CAH Vilentum Dronten gained a lot of experience with successful training programs for mostly Dutch entrepreneurs who were moving to the US on large scale dairies. Since 2006 CAH has a course for Farm Manager on large scale dairies which is upgraded to a full year for Dutch students and a full program for international students. In the Netherlands this is the only program available on all (applied) universities.

TYPE OF PROGRAM	LEVEL	LANGUAGE	
AD Agricultural Entrepreneurship*	AD	Dutch	
Agricultural Entrepreneurship*	ВА	Dutch	
Dutch Livestock*	BA	Dutch	
International Livestock Production (ILP)	BA	English	
International Agribusiness Management (IAM)	BA	English	
Master Agribusiness Development	MA	English	

Table 3.1 – Overview of CAH Dairy programs (\*Titles are translated from Dutch)

The start and development of this program was in close cooperation with Global Dairy Farmers and many students have had a management traineeship on farms of GDF members and/or a company placement at a GDF-partner.

#### 3.3 Future perspectives

Future perspectives on education programs can be developed by writing down internal analysis with strong and weak points of the current situation.

#### Current situation:

- The current International Agribusiness Management is a success, yearly about 25 students choose this program (called 'minor');
- Dutch Applied Universities have applied research as an extra task besides education. This applied research programs is coordinated by a professor (in Dutch called 'lector');
- Aeres group is the mother organization of CAH
  Vilentum. Other partners are for example Groenhorst (practical pre-University school) and Aeres
  Practical Training Center. There are opportunities
  for different programs, for example BTEC or a
  Groenhorst-CAH Vilentum program;
- Aeres Practical Training Center Dronten is building new dairy facilities with three different barns for education (three farming strategies), a new young-stock facility and different innovations will be implemented.

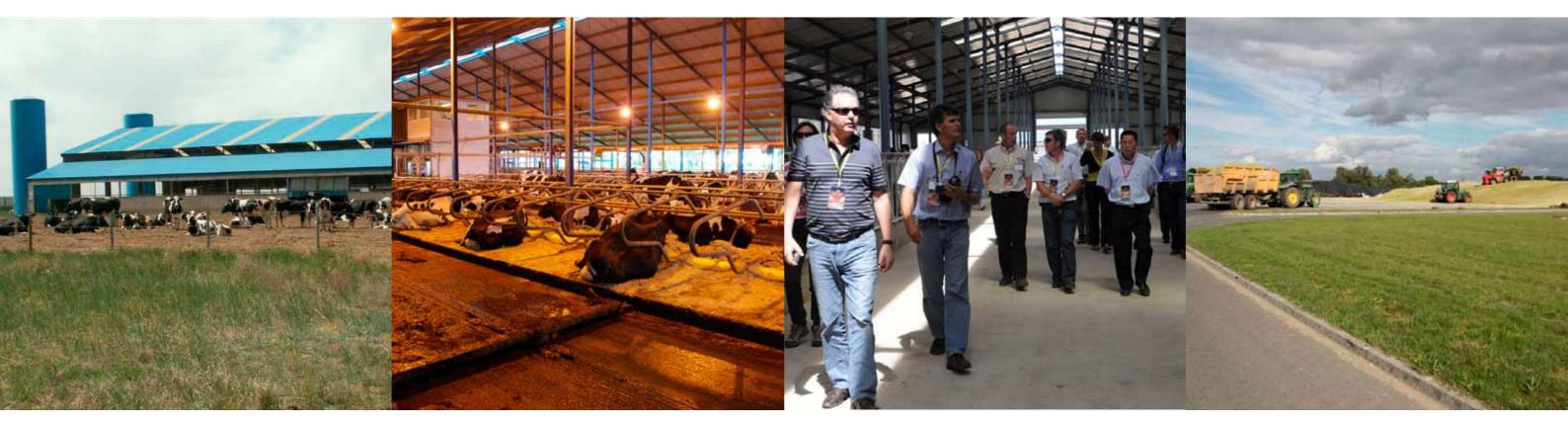
Strong and weak points related to Global Dairy Farming are summarized below:

#### Strong points

- Largest student numbers for Applied Livestock and Entrepreneurship in the Netherlands
- Students and industry give a good evaluation of quality of the Livestock study programs
- Only University with International Agribusiness Management program
- Aeres group cooperation of different levels of study and training

#### Weak points

- There is only a program with the focus on farm management, but not with the focus on farm support and/or International Farm Advisor
- Not a clear structure available how CAH Vilentum students go to GDF-members (f.e. for Management Traineeship)
- Applied research possibilities or lector with focus on Global Dairy Farming have not been used to help GDF business partners
- More relation with Global Dairy Research, more input from education can be made.



China

## 4. Global market analysis

This chapter contains the external analysis and provides insight in the developments of the different global dairy markets. Sources are different e-magazines and studies from GDF and its partners.

#### **4.1 Europe West**

Market Analysis for Western Europe: Denmark, Germany, France, Netherlands, United Kingdom and Ireland.

#### General market information

In the 'dairy countries' of Western Europe' the dairy market on regular products is expected not to grow. It seems even difficult to keep the market stable. Only market growth is expected in special foods and (whey-) ingredients. As a consequence the supply chain in total will not grow. Milk companies are more international oriented and the enlargement of scale will continue to serve more and different markets. Business partners are becoming more global, but will have their focus on certain regions.

# Developments in the dairy sector on farm level

Farmers are waiting on the abolishment of the quota system and are planning to produce more milk after 2015. Industry is building new capacities for milk processing. Increase milk production is not always

profitable for 2 reasons:

- Lack of land and possibilities (fodder crops, manure).
- To increase milk production capital input is needed. New bank rules make it less possible and attractive. Returns in the dairy sector are often lower than interest rates.

Other farmers tend to specialize and because of high prices precision farming will become more attractive. Within 10 years a lack of farmers is foreseen not only in western Europe, but worldwide. So there is a need to make dairy farming more attractive.

#### Challenges for the dairy sector

- High level of management and education needed in a global perspective
- Extreme high demand for quality and safe milk
- More specialized (regional) products and chains
- Use of new techniques and ICT makes farming more attractive and specific
- Well organized processing industry, especially in the Netherlands and Denmark
- Supply chain well organized to serve new markets

#### Threats for the dairy sector

 Farmers are supply driven and not educated in innovative thinking and other ways of farming/ entrepreneurship

- Globalization of the dairy sector is a fact, producers are not fully aware of the need to orient themselves on global developments
- On national level new ways of education are needed
- Competition from other Applied sciences schools in a shrinking market.

# Education questions to be implemented in study programs

- More orientation on global developments and innovations
- More a (regional or global) market driven approach
- Communication, especially with consumers and citizens
- Intensive contact with the industrial dairy companies
- HRM
- Integrated farm approach, especial in management
- Use of high tech and sustainable processes for making farming more attractive

#### 4.2 Europe East

Market Analysis for Eastern Europe: Poland, Baltic States, Russia, Ukraine, Hungary, Romania and Bulgaria.

#### General market information

Only in Poland and the Baltic States the dairy sector is growing. Hungary and Romania do have good condi-

tions for milk production and it is expected these markets will grow. In other countries the milk production grows only around big cities. Governments like to support the dairy sector but with less success as expected. The processing industry is not well organized. More and more western processors are taking over the lead

#### Developments in the dairy sector at farm level

The traditional way of milk production in small family farms is under pressure. The old sovchozes and kolchozes are modernized with western equipment or still producing in the old way. More new turn key projects with western investors, techniques and ICT are established with herd sizes of  $\rightarrow$  500 heads. Biggest issue is the lack of good managers, workers and advisors. Education programs are not capable to change culture and habits. Advisors are not able to apply or implement results of research. And on farm level the weak point is the extreme high replacement rate of cattle.

#### Challenges for the dairy sector

- Growing demand of higher quality milk
- Higher incomes for the consumers
- Use of new techniques and ICT
- Better education programs needed for managers, workers and advisors

#### Threats for the dairy sector

- Competition with other sectors as the (car-)industry
- Less interest of the next generation in especially the dairy sector
- Need of high financial input with slow Return on Investment (ROI).
- Strong demand for new skills but not for western prices

# Education questions to be implemented in study programs

- HRM, including increasing of motivation of future employees
- More orientation on external factors around farms
- Use of ICT, e-learning and modern techniques
- Getting used to self-learning programs
- How to apply results of research and give effective advice with latest insights

#### 4.3 China and South East Asia

Market Analysis for: China, Vietnam, Malaysia, Indonesia, Thailand, Pakistan and India

#### General market information

Mentioned countries are the leading countries for developing new milk regions, due to change of consumption patterns and a growing amount of consumers who likes to pay processed milk products instead of 'street milk'.

For the international dairy industry (processors and suppliers) it is difficult to enter these new markets, due to very strict regulations and restrictions. Only a few well organized suppliers and processors do have entrance and are co-operating with the national industries. The speed of developments is going in the same consecution as written.

#### Developments in the dairy sector at farm level

Due to milk scandals and stronger regulations small family farms are going out of business. This is strongly supported by the governments, in China, even by law. Expected trend is enlargement of scale per farm up to 15-20 cows per herd in India until at least 150 cows per herd in China. The supply chain is working on this new market under difficult circumstances.

A new trend is developing bigger total turn key projects from at least 250 cows up to 4000 cows with help of dairy processors and external investors. Biggest problem is lack of management and motivation. Well skilled managers and advisors are needed.

#### Challenges for the dairy sector

- Growing demand of packaged milk products
- Enlargement of scale
- Use of western techniques and ICT

#### Threats for the dairy sector

- Regional laws and regulations
- · Not accepting western styled management
- Lack of motivation of employees
- Urbanization, with no return of young people to the countryside

# Education questions to be implemented in study programs

- Implementing of accepted self-study programs with excellent coaching for managers, workers and advisors (including after-studies and long life learning trajectory)
- Extra attention for HRM
- Focus on 3 topics: Growing feed, growing heifers and producing milk
- SOP's
- International orientation

#### 4.4 Africa

Market Analysis for Africa in general.

#### General market information

Africa's milk production strongly reduced for political reasons and wars. Compared to earlier mentioned markets the education questions are different because of big differences in farm size but most of all farm structure and culture.

#### Developments in the dairy sector at farm level

Smaller regional food cycles are leading to an increase of milk production within these cycles. Supported by western support programs it is leading to some success stories. This is leading to an increase in demand of management knowledge.

In some countries as Algeria, Morocco, Egypt, Kenya, South Africa and Tanzania western investors together with locals are developing well managed dairy farms

#### Challenges for the dairy sector

Growing demand of milk

#### Threats for the dairy sector

 Influence of China on the use of land (mostly in East Africa)

# Education questions to be implemented in study programs:

- Special programs for developing small family farms in local and regional food cycles.
- International interest for the growing dairy sector.

## 5. SWOT analysis

This chapter contains the SWOT analysis to determine future perspectives for international Dairy Education based on the Strong and Weak points from the internal analysis (chapter 3) and the Opportunities and Threats from the external analysis. Figure 5.1 contains the SWOT analysis and the outcome of the confrontation.

#### **STRONG**

Largest student numbers Applied Livestock and Entrepreneurship in the Netherlands, good quality of the program

Only University with International Agribusiness Management program

Aeres group cooperation of different levels of study and training (from BTEC, AD, Bachelor to Master)

#### **WEAK**

Focus on farm management, less on International Farm Advisors

Not a clear structure available how CAH Vilentum students go to GDF-members (f.e. for Management Traineeship)

Applied research possibilities or lector with focus on Global Dairy Farming have not been used to help GDF business partners

Closer relation with Global Dairy Research needed, more input from education

#### **OPPORTUNITIES**

Globalization of the dairy industry

Strong demand of management (-skills)

Strong demand of knowledge and advisors who can apply this

Enlargement of scale

#### **THREATS**

Differences in culture and motivation

Way of education

Not accepting western styled management in all countries

Costs

#### **STRONG**

Number students + quality program

Unicity IAM

Aeres group partners (BTEC, AD, Bachelor to Master)

#### **WEAK**

International Farm Advisors

Possibilities Traineeship GDF-members

Application research via lector together with GDF

Input education to GDR

#### **OPPORTUNITIES**

Globalization of the dairy industry

Strong demand on management (-skills) and advisors

Enlargement of scale

CAH Vilentum has a good position

#### Opp-strenght

Program is ok  $\rightarrow$  optimization strategy

(re)Develop program for advisors large scale

Program for short training programs or self-study

Partner in turn key projects

#### Opp-weak

Develop BC's for CAH Vilentum research program

Professor Global Dairy Farming (irt GDR) (~lector)

#### **THREATS**

Differences in culture and motivation

Way of education

Not accepting western styled management

Costs

#### Threats-strong

On farm training

#### Threats-weak

...



# 6. Conclusion: 7 future perspectives for International Dairy Education

The SWOT and confrontation matrix result in different strategies for future perspectives for International Dairy Education. These strategies show new perspectives for the future in a cooperation model between Global Dairy Farmers and CAH Vilentum.

#### Seven new perspectives:

#### 1. Optimization International Agribusiness Management (IAM) program

CAH Vilentum needs to optimize the program further. The basis is good, but it can be improved in detail. Better integration of guest lectures by GDF business partners, relationship GDF farmers, experience more with distance learning etcetera.

#### 2. Develop a program for advisors in line with IAM

There is a strong need for good advisors for large scale dairy farms. Competencies of 'regular' advisors do not fit in this profile because of another setting where culture, KPI's and scale are different.

#### 3. Create a platform for e-learning

With the new ICT possibilities and learning on distance a platform to facilitate e-learning is recommended and can fulfill Life Long Learning needs.

# 4. Provide short programs for (on farm) training and/or (online) self-study

Fill up the distance gap and develop short programs which are able to work with different distance learning

possibilities, or fly over for one week to different dairies, let students carry out small parts. This can be in cooperation with GDF business partners.

#### 5. Make Education partner in turn key projects

Dairy Farms in turn key projects have a huge knowledge and education demand. Making education partner of turn key projects this can result in better results for dairy farms and gives the business partners the opportunity to focus more on an excellent start up of the new or improved dairy (see Appendix I for additional information)

# 6. Develop a research program at CAH Vilentum with focus on large scale dairy farming in an international context (Global Dairy Farming)

Write small business cases in cooperation with GDF. In 2014 there is a CoE regulation in Netherlands which will provide extra help to set up a good structure for the future.

# 7. Give the total research agenda a face in a Professor Global Dairy Farming

A professor (lector) Global Dairy Farming will give a face and focus on the research which will be carried out for GDF (-consortium), GDR and (partly) by students which will be in the different CAH Vilentum courses and when necessary from other Universities.

# Appendix I – Education partner in turn key projects

The goal of the co-operation in turn key projects is to act together in developing new products and (new-) markets and function on following levels:

- Develope appropriate education: demand driven, focus on suitable management skills and more
- Network: GDF as a network partner (often together with partners such as VIV, Dairy-XPO and others) for opening and researching existing and new markets.

#### Commercial goals:

- Work with partners on projects and create business in the markets entered. In different markets different outside GDF partners can be attracted after permission of the consortium
- Realizing projects
- Suitable managers and workers, if possible with local input
- After sales excellent organized by a common approach

# Role CAH Vilentum Dronten (together with for example University of Guelph)

- Prepare and use the educational system to help set up these projects and give students the chance to take part in a consortium project
- Create a data base with information from the different projects. This can be used within education/ University projects

- Organizing and taking part in research projects as Calf Rearing; BASF-Lutrell and others
- Creating a pool of students for:
  - Traineeships and assessments on GDF farms and internships at the Industry partners
  - Industry partners are involved in practical education programs from CAH Vilentum
  - Students have a job opportunity by taking part in the different projects

#### Role GDF

- Network coordinator and developer and acquisition
- Involved in setting up and use of new educational programs.
- Coaching international students
- A facilitator from CAH-GDF and will work on finding the right people and industry partners to attract in the projects from this consortium
- From GDF, the management is involved in setting up concepts for the consortium and are involved in the projects

#### **Role Industry Partners**

- Responsibilities are with the consortium partners

   one partner in particular who takes the lead in entering this new market
- To point a local representative this can be an objective person or a company employee from one of the consortium partners





#### PROJECT 1: KAZACHSTAN

Cowhouse Lely JOZ

...

Student CAH Vilentum / Guelph Local representative

## PROJECT 2:

Jaylor JOZ

..

Student CAH Vilentum /
Guelp
Local repr: JOZ or NAFTC

#### PROJECT 3: CALF-FIT

Förster Technik Sloten Cowhouse CAH Vilentum Student CAH Vilentum / Guelph GDF Manager

#### Other products are:

- 1. GDF-Dairy Monitor and Global Dairy Outlook as GDF products which trends and developments in the dairy sector are showing.
- 2. Efficiency larger dairy farms. Together with Finnish consultants and university establishment a project on labor management on larger dairy farms, with as pilot: farms with a robot.
- Calf Fit project: developing a web app for use in rearing young cattle on (large-) dairy farms worldwide. Starting in the EU.
- 4. Cooperation Nestle: Establish long term cooperation with Nestle China in the field of managing (large) Chinese dairy companies.

- Development of distance learning, e-learning and communication between different countries / locations, and companies (international knowledge network).
- 6. Trouble shooting: possibilities to jump on a number of relatively small, short-term but urgent questions arising out of the news

#### **Critical Success Factors:**

To work on international market oriented education critical success factors are:

- Trust and loyalty of all partners.
- Possibilities for bridging cultural differences
- Accepting western styled management
- Laws and regulations

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8251 JZ Dronten

T. 088 - 020 6000

info@kcagro.nl www.kcagro.nl