



STRATEGIES OF THE WALLOON DAIRY BREEDERS FACED TO THE UNCERTAIN DAIRY FUTURE

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Gembloux Agro-Bio Tech
Université de Liège

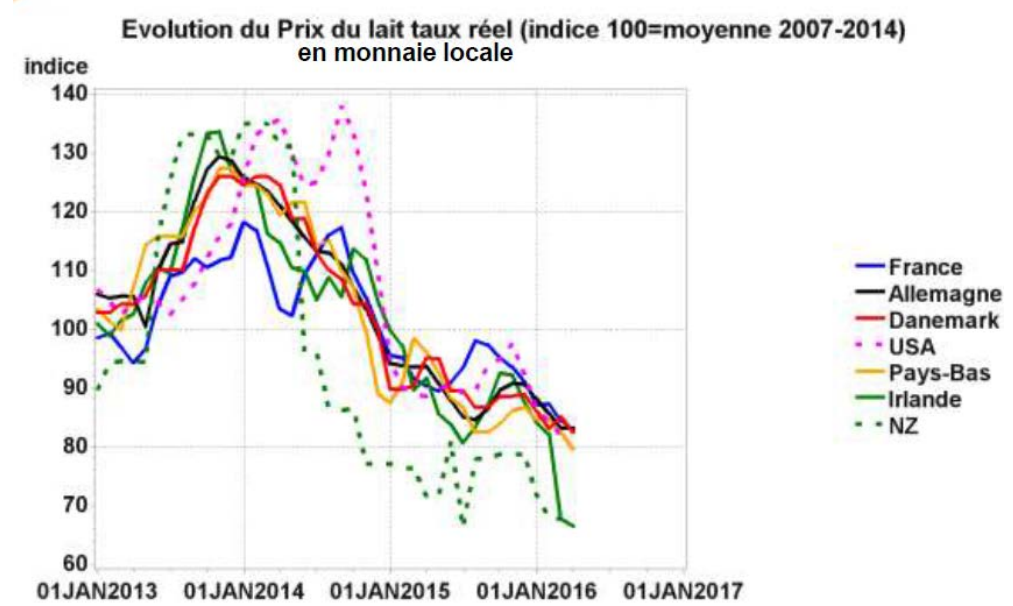


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PRODUCTEURS





Quota



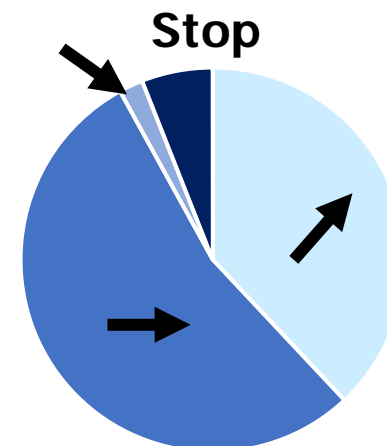
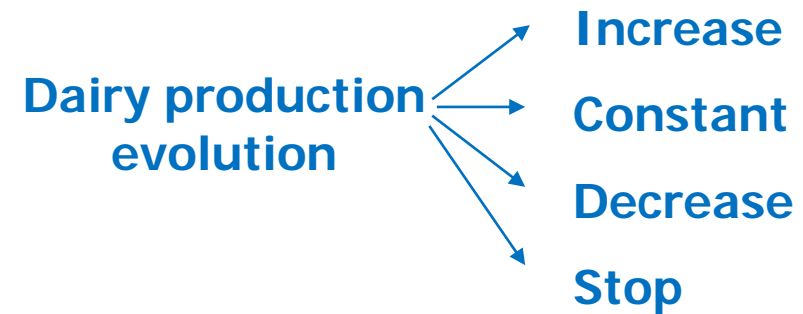
Evolution of the milk price, real rate (index100 = mean 2007-2014)

Source : Observatoire européen du marché du lait – traitement institut de l'Elevage, 2016



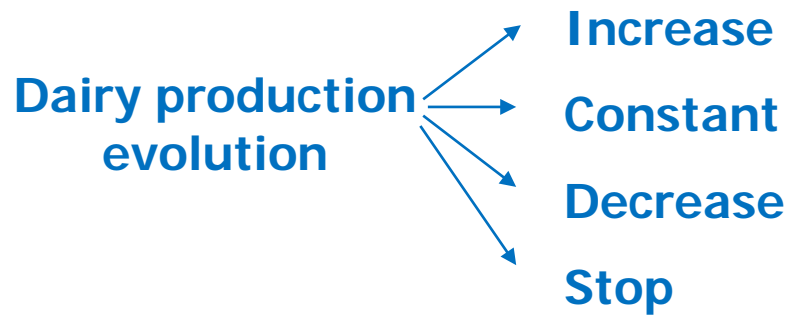
Farms characteristics





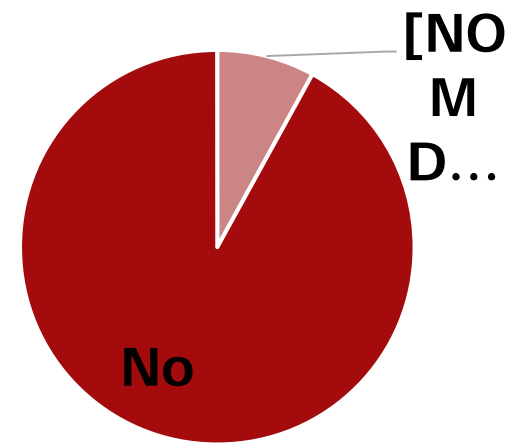
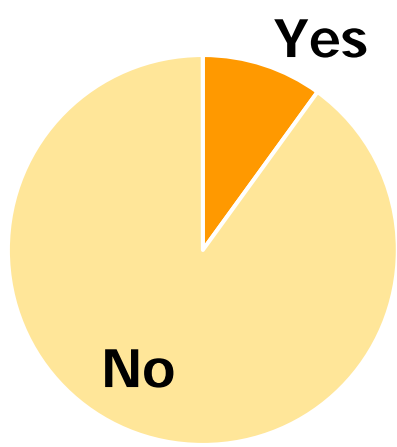
Survey of Walloon dairy breeders
(N = 245)
Nov 2014 - Feb 2015

Creation of groups



Survey of Walloon dairy breeders
(N = 245)
Nov 2014 - Feb 2015

Creation of groups





- Workforce
- Agricultural area
- Legal status
- Animal production
- ...

Survey of
Walloon dairy
breeders
(N = 245)
Nov 2014 - Feb 2015

Creation of
groups

Quantitative variables:
Study of the difference
between the groups (GLM)

Qualitative variables:
Study of the independence
with the groups (Xhi²)

Context



Objectives



Data & Analyses



Results & Discussion



Conclusions



Available workforce



Context



Objectives



Data &
Analyses



Results &
Discussion



Conclusions

Available workforce



Farm characteristics	Dairy production evolution		
	Increase	Constant	Stop
N	94	132	15
Number of family members	4.51 ^a	3.73 ^{a,b}	3.47 ^b
Number of self-employed workers	1.58 ^a	1.48 ^a	1.27 ^a
Number of employees	0.28 ^a	0.12 ^a	0 ^a
Number of full-time workers	1.87 ^a	1.72 ^{a,b}	1.33 ^b
Number of part-time workers (> halftime)	0.26 ^a	0.23 ^a	0.33 ^a

Context



Objectives



Data &
Analyses



Results &
Discussion



Conclusions

Available workforce



Farm characteristics	Dairy production evolution			Dairy production alternative valorisation	
	Increase	Constant	Stop	No	Yes
N	94	132	15	206	22
Number of family members	4.51 ^a	3.73 ^{a,b}	3.47 ^b	4.09 ^a	4.27 ^a
Number of self-employed workers	1.58 ^a	1.48 ^a	1.27 ^a	1.53 ^a	1.46 ^a
Number of employees	0.28 ^a	0.12 ^a	0 ^a	0.15 ^b	0.36 ^a
Number of full-time workers	1.87 ^a	1.72 ^{a,b}	1.33 ^b	1.78 ^a	1.77 ^a
Number of part-time workers (> halftime)	0.26 ^a	0.23 ^a	0.33 ^a	0.45 ^a	0.64 ^a

Context



Objectives



Data &
Analyses



Results &
Discussion



Conclusions

Available workforce



Farm characteristics	Dairy production evolution			Dairy production alternative valorisation		Diversification	
	Increase	Constant	Stop	No	Yes	No	Yes
N	94	132	15	206	22	212	18
Number of family members	4.51 ^a	3.73 ^{a,b}	3.47 ^b	4.09 ^a	4.27 ^a	4.10 ^a	4.24 ^a
Number of self-employed workers	1.58 ^a	1.48 ^a	1.27 ^a	1.53 ^a	1.46 ^a	1.51 ^b	1.83 ^a
Number of employees	0.28 ^a	0.12 ^a	0 ^a	0.15 ^b	0.36 ^a	0.18 ^b	0.44 ^a
Number of full-time workers	1.87 ^a	1.72 ^{a,b}	1.33 ^b	1.78 ^a	1.77 ^a	1.77 ^a	2.11 ^a
Number of part-time workers (> halftime)	0.26 ^a	0.23 ^a	0.33 ^a	0.45 ^a	0.64 ^a	0.46 ^b	0.72 ^a

Context



Objectives



Data &
Analyses



Results &
Discussion



Conclusions



Agricultural area



Context



Objectives



Data &
Analyses



Results &
Discussion

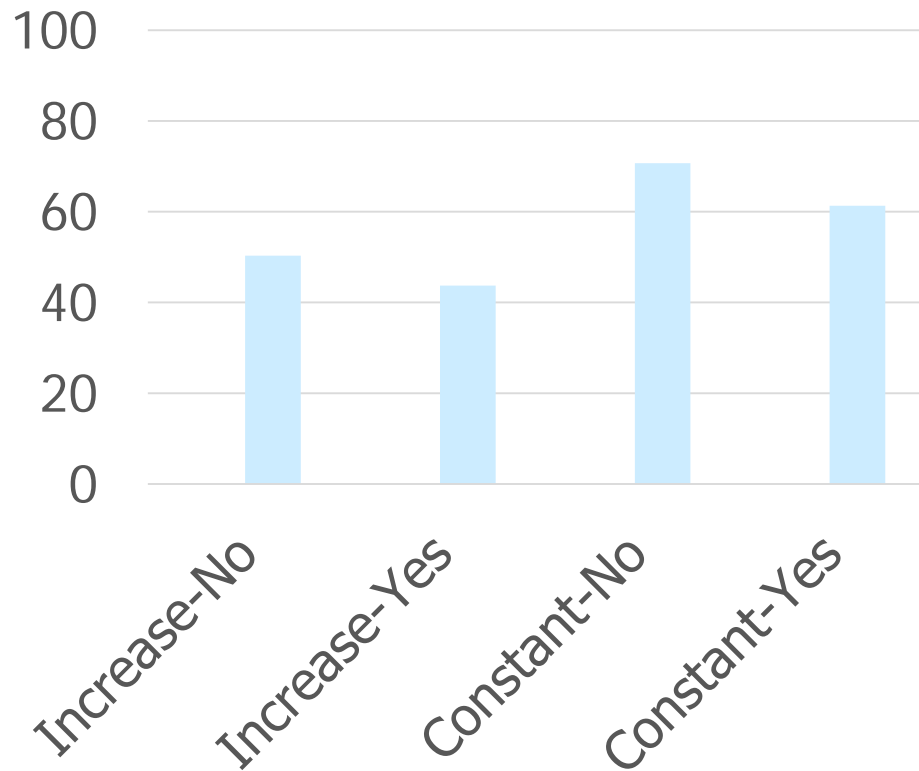


Conclusions

Agricultural area



Farm characteristics	Dairy production evolution		
	Increase	Constant	Stop
N	94	132	15
Total agricultural area (Aa) (ha)	92.2 ^a	84.0 ^a	79.0 ^a
Aa in property (ha)	34.5 ^a	25.0 ^{a,b}	20.7 ^b
Aa between 1 and 4 km (ha)	26.7 ^a	19.7 ^{a,b}	17.2 ^b
Aa > 10 km (ha)	10.3 ^{a,b}	6.6 ^b	17.7 ^a

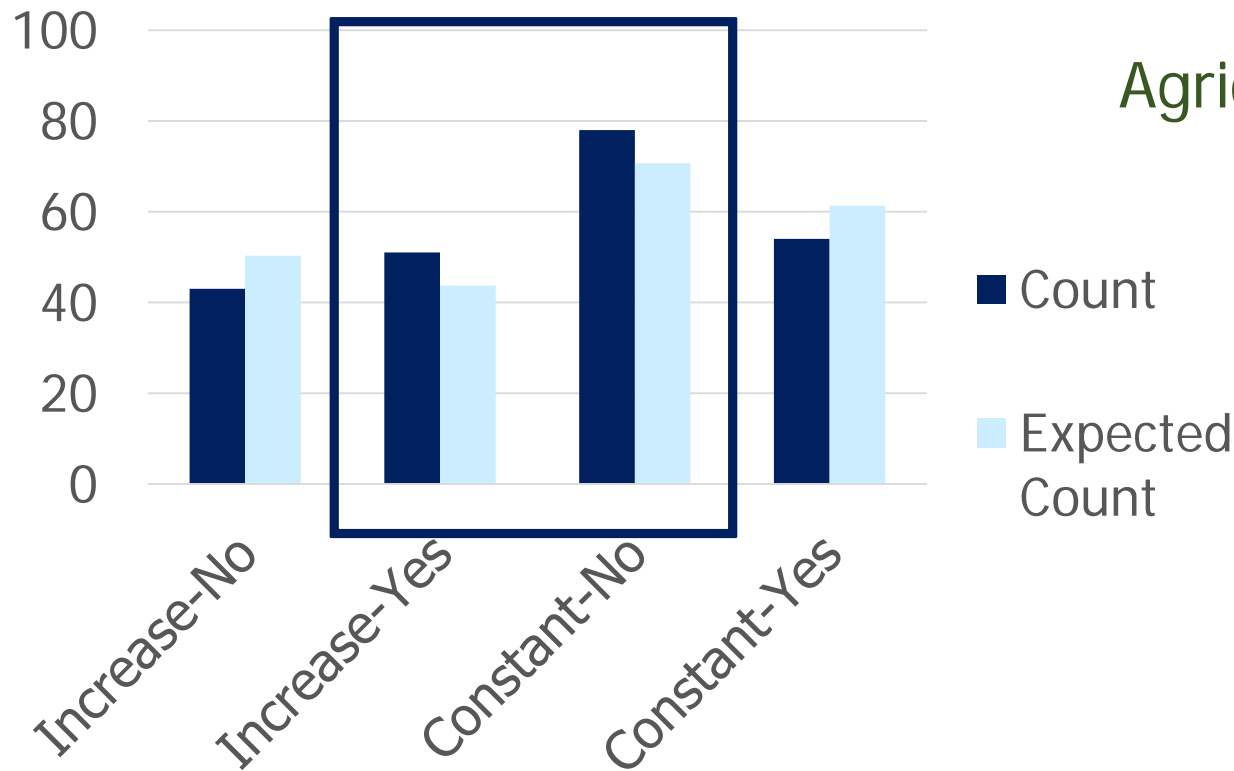


Agricultural area



Dependence
Dairy production evolution
&
Increase of the agricultural area since 5 years

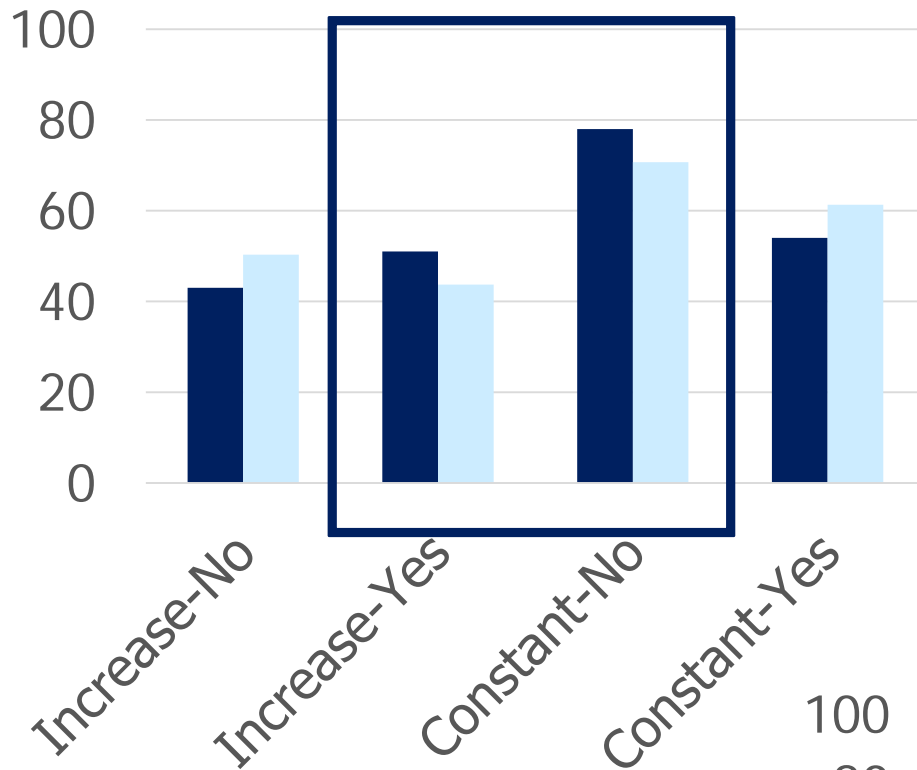
Expected Count



Agricultural area



Dependence
Dairy production evolution
 &
Increase of the agricultural area since 5 years

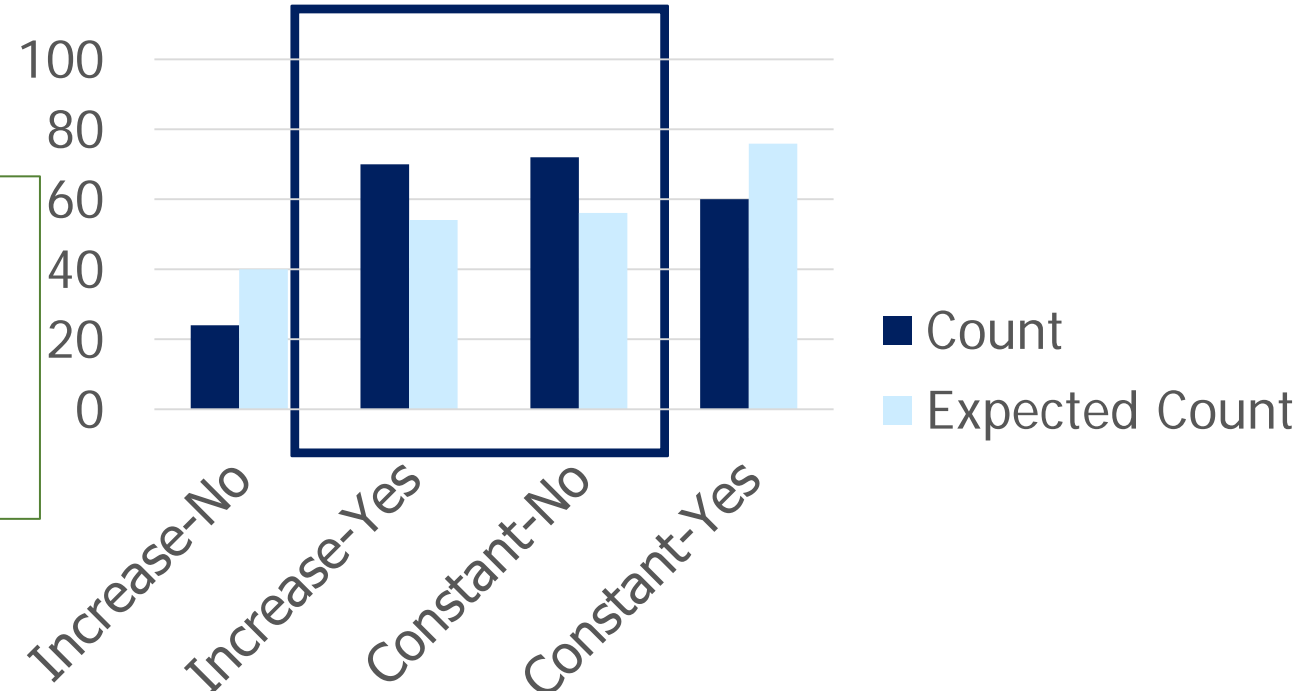


Agricultural area



Dependence
Dairy production evolution
 &
Increase of the agricultural area since 5 years

Dependence
Dairy production evolution
 &
Increase of the agricultural area within 5 years



Context



Objectives



Data &
Analyses



Results &
Discussion



Conclusions

Agricultural area



Farm characteristics	Dairy production evolution		
	Increase	Constant	Stop
N	94	132	15
Total agricultural area (Aa) (ha)	92.2 ^a	84.0 ^a	79.0 ^a
Aa in property (ha)	34.5 ^a	25.0 ^{a,b}	20.7 ^b
Aa between 1 and 4 km (ha)	26.7 ^a	19.7 ^{a,b}	17.2 ^b
Aa > 10 km (ha)	10.3 ^{a,b}	6.6 ^b	17.7 ^a

Context



Objectives



Data &
Analyses



Results &
Discussion



Conclusions

Agricultural area



Farm characteristics	Dairy production evolution		
	Increase	Constant	Stop
N	94	132	15
Total agricultural area (Aa) (ha)	92.2 ^a	84.0 ^a	79.0 ^a
Aa in property (ha)	34.5 ^a	25.0 ^{a,b}	20.7 ^b
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Context



Objectives



Data &
Analyses



Results &
Discussion

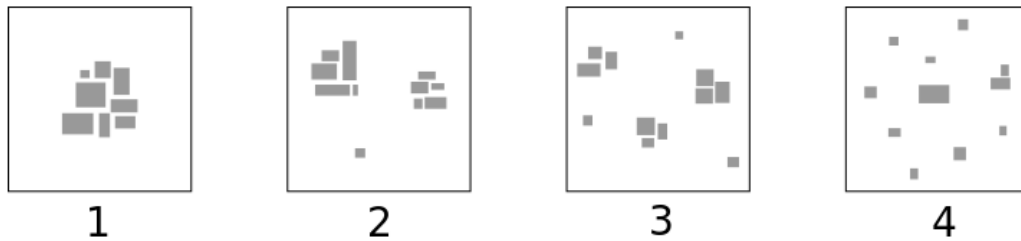


Conclusions

Agricultural area



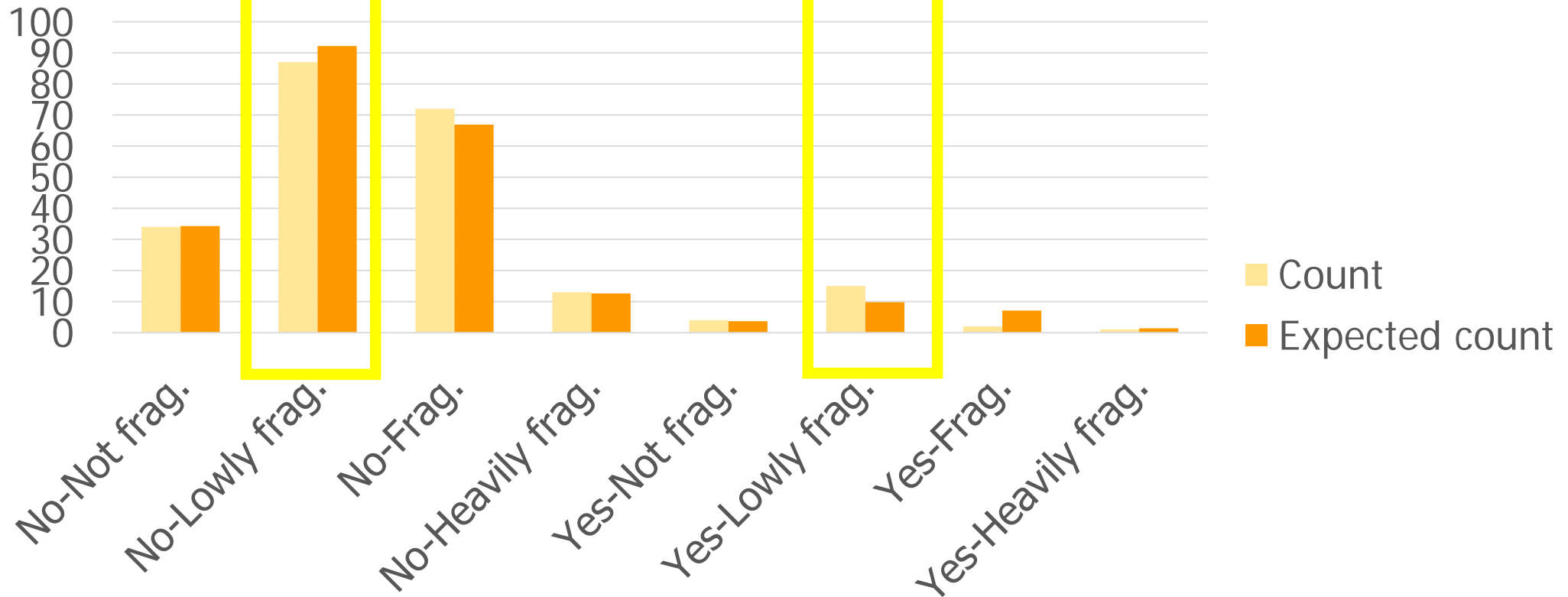
Farm characteristics	Dairy production evolution			Dairy production alternative valorisation	
	Increase	Constant	Stop	No	Yes
N	94	132	15	206	22
Total agricultural area (Aa) (ha)	92.2 ^a	84.0 ^a	79.0 ^a	88.1 ^a	82.1 ^a
Aa in property (ha)	34.5 ^a	25.0 ^{a,b}	20.7 ^b	29.4 ^a	25.2 ^a
Aa between 1 and 4 km (ha)	26.7 ^a	19.7 ^{a,b}	17.2 ^b	23.2 ^a	21.5 ^a
Aa > 10 km (ha)	10.3 ^{a,b}	6.6 ^b	17.7 ^a	8.7 ^a	2.9 ^a



Agricultural area



Dependence
Dairy production alternative valorisation
&
Agricultural spatial distribution



Context

Agricultural area



Objectives

Data & Analyses

Results & Discussion

Conclusions

Farm characteristics	Dairy production evolution			Dairy production alternative valorisation		Diversification	
	Increase	Constant	Stop	No	Yes	No	Yes
N	94	132	15	206	22	212	18
Total agricultural area (Aa) (ha)	92.2 ^a	84.0 ^a	79.0 ^a	88.1 ^a	82.1 ^a	87.5 ^a	89.9 ^a
Aa in property (ha)	34.5 ^a	25.0 ^{a,b}	20.7 ^b	29.4 ^a	25.2 ^a	28.0 ^b	48.4 ^a
Aa between 1 and 4 km (ha)	26.7 ^a	19.7 ^{a,b}	17.2 ^b	23.2 ^a	21.5 ^a	22.0 ^b	32.9 ^a
Aa > 10 km (ha)	10.3 ^{a,b}	6.6 ^b	17.7 ^a	8.7 ^a	2.9 ^a	8.3 ^a	5.1 ^a

Context



Objectives



Data & Analyses



Results & Discussion



Conclusions



Animal production informations



Animal production informations



Context



Objectives



Data & Analyses



Results & Discussion



Conclusions

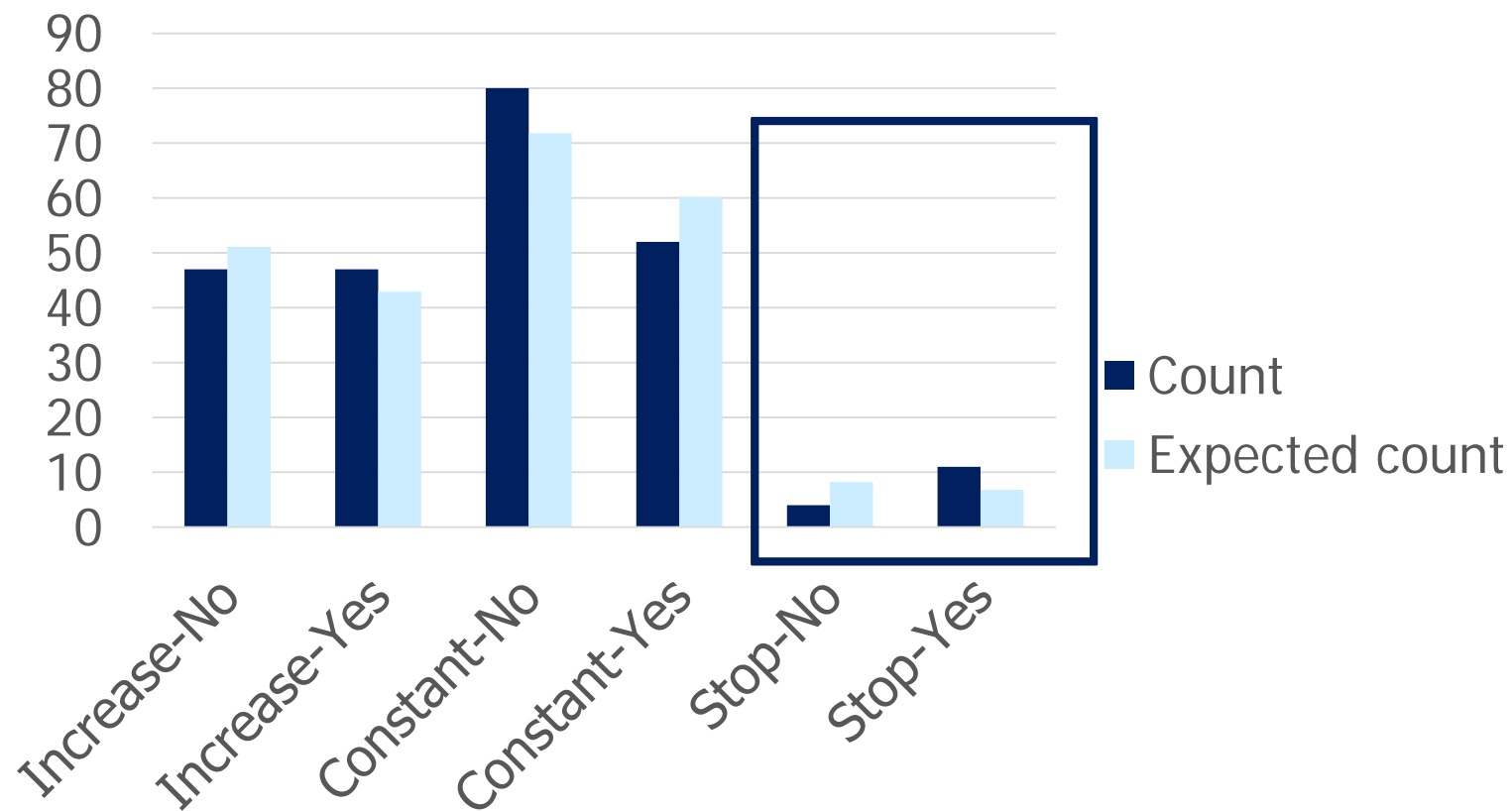
Farm characteristics	Dairy production evolution		
	Increase	Constant	Stop
N	94	132	15
Delivery quota of milk	659,000 ^a	514,000 ^b	301,000 ^b
Number of cows	84.1 ^a	79.1 ^a	52.7 ^a



Animal production informations



Dependence
Dairy production evolution
 &
Other animal production

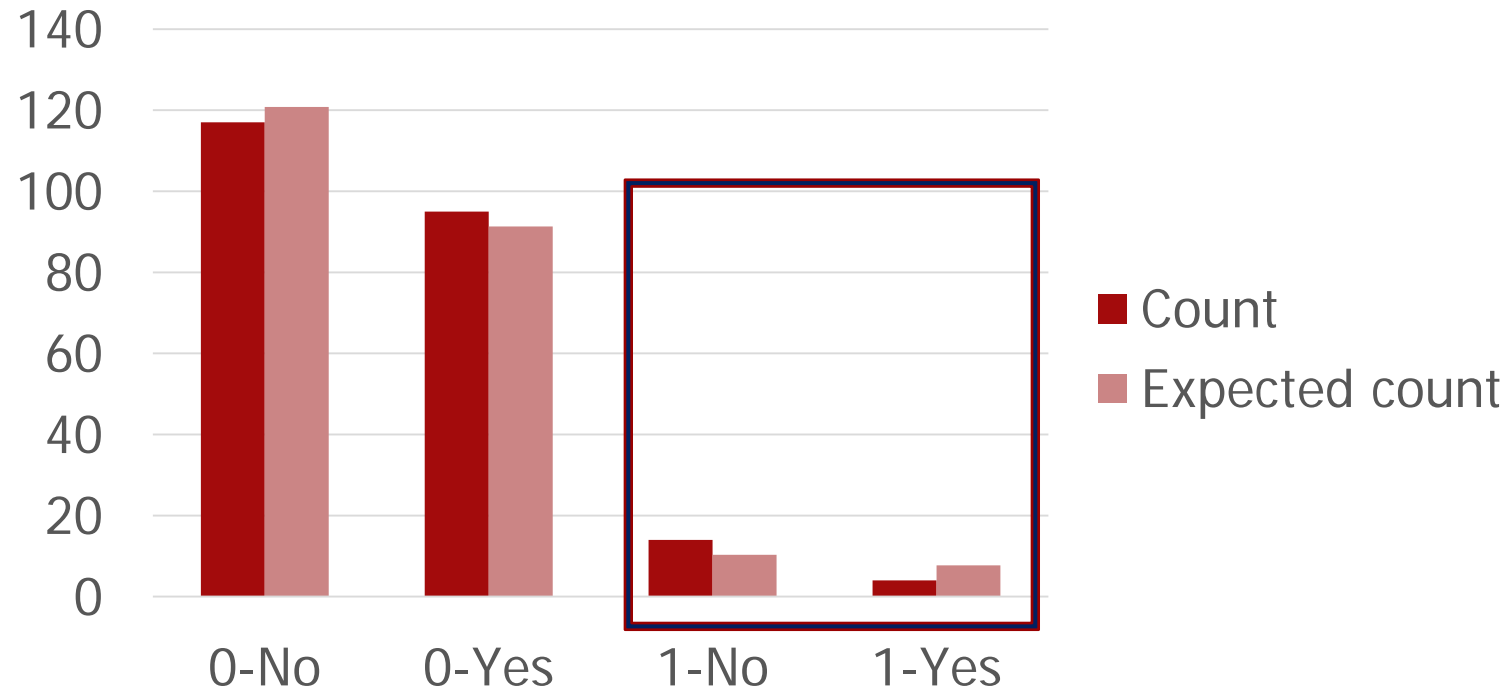




Animal production informations



Dependence
Diversification (0-1)
&
Other animal production



Context



Objectives



Data &
Analyses



Results &
Discussion



Conclusions



Other characteristics

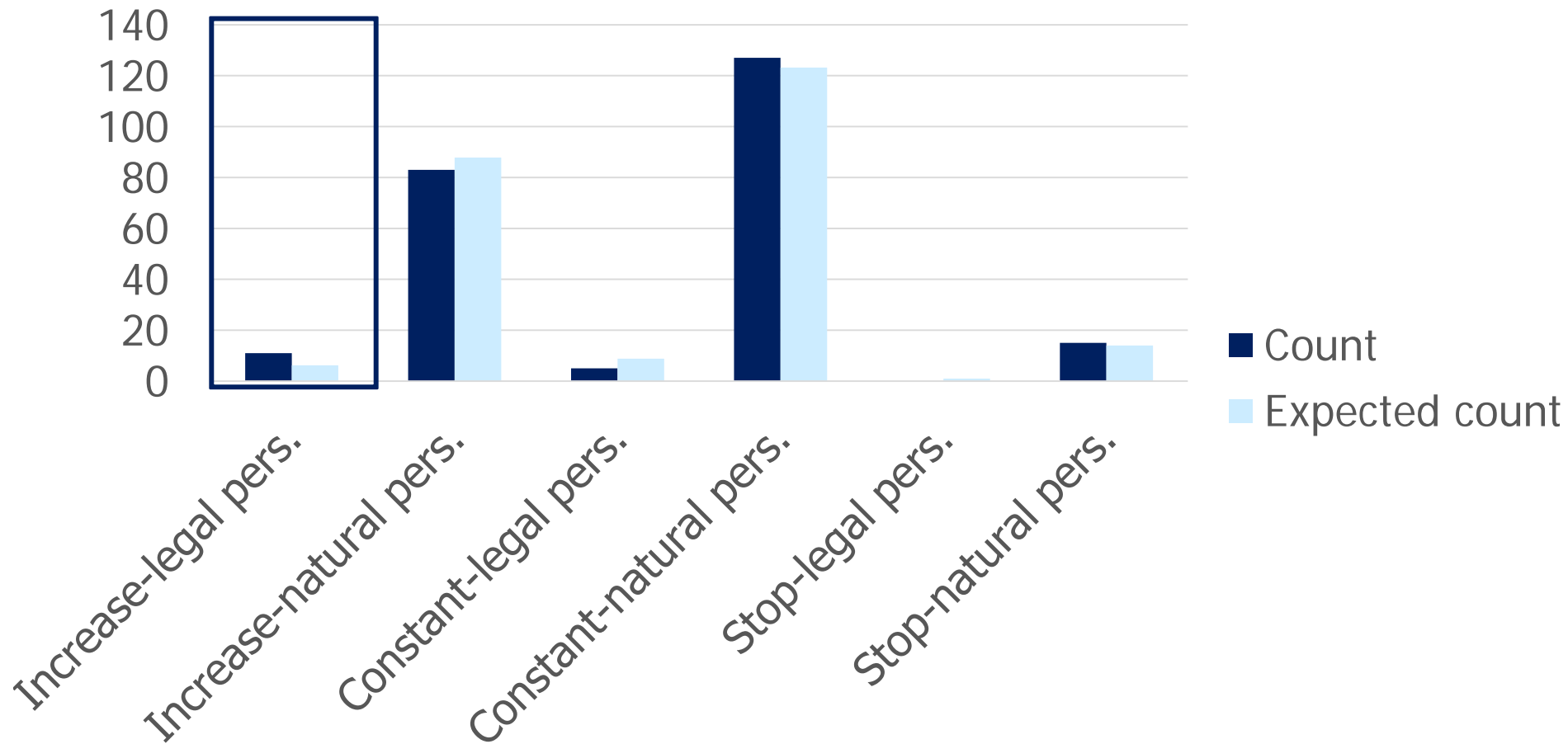
- Year of installation
- Legal status



Dependence
Dairy production evolution
 &
Legal status

Other characteristics

- Year of installation
- Legal status





Other characteristics

- Year of installation
- Legal status

Farm characteristics	Dairy production evolution			Dairy production alternative valorisation		Diversification	
	Increase	Constant	Stop	No	Yes	No	Yes
N	94	132	15	206	22	212	18
Year of installation	1996.8 ^a	1994.4 ^a	1995.2 ^a	1995.1 ^a	1997.8 ^a	1994.8 ^b	2002.1 ^a



Farms
characteristics

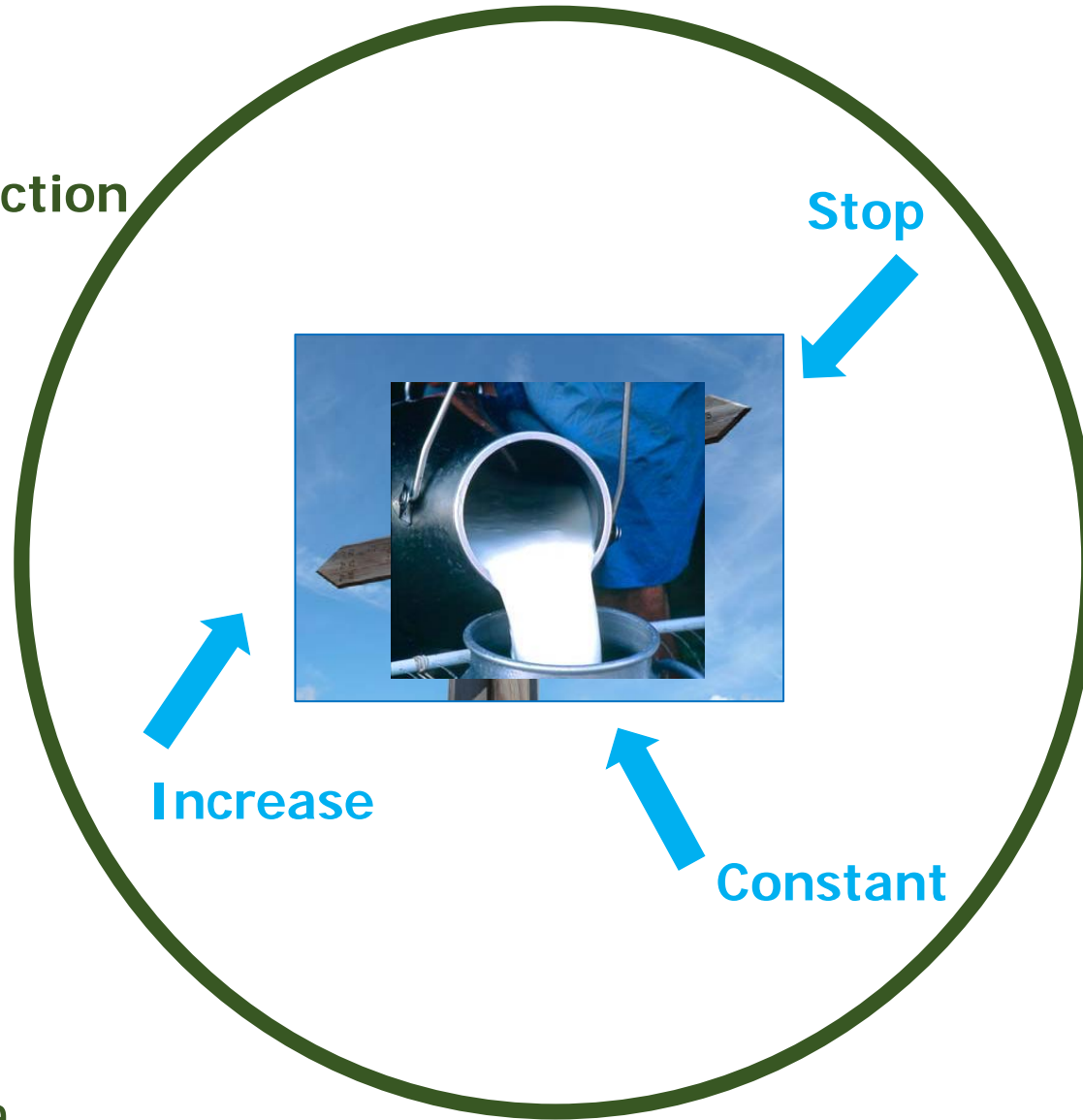




Evolution of the dairy production

Farms characteristics

- Legal status
- Labour force
- Agricultural area
- Animal production



Context



Objectives



Data & Analyses



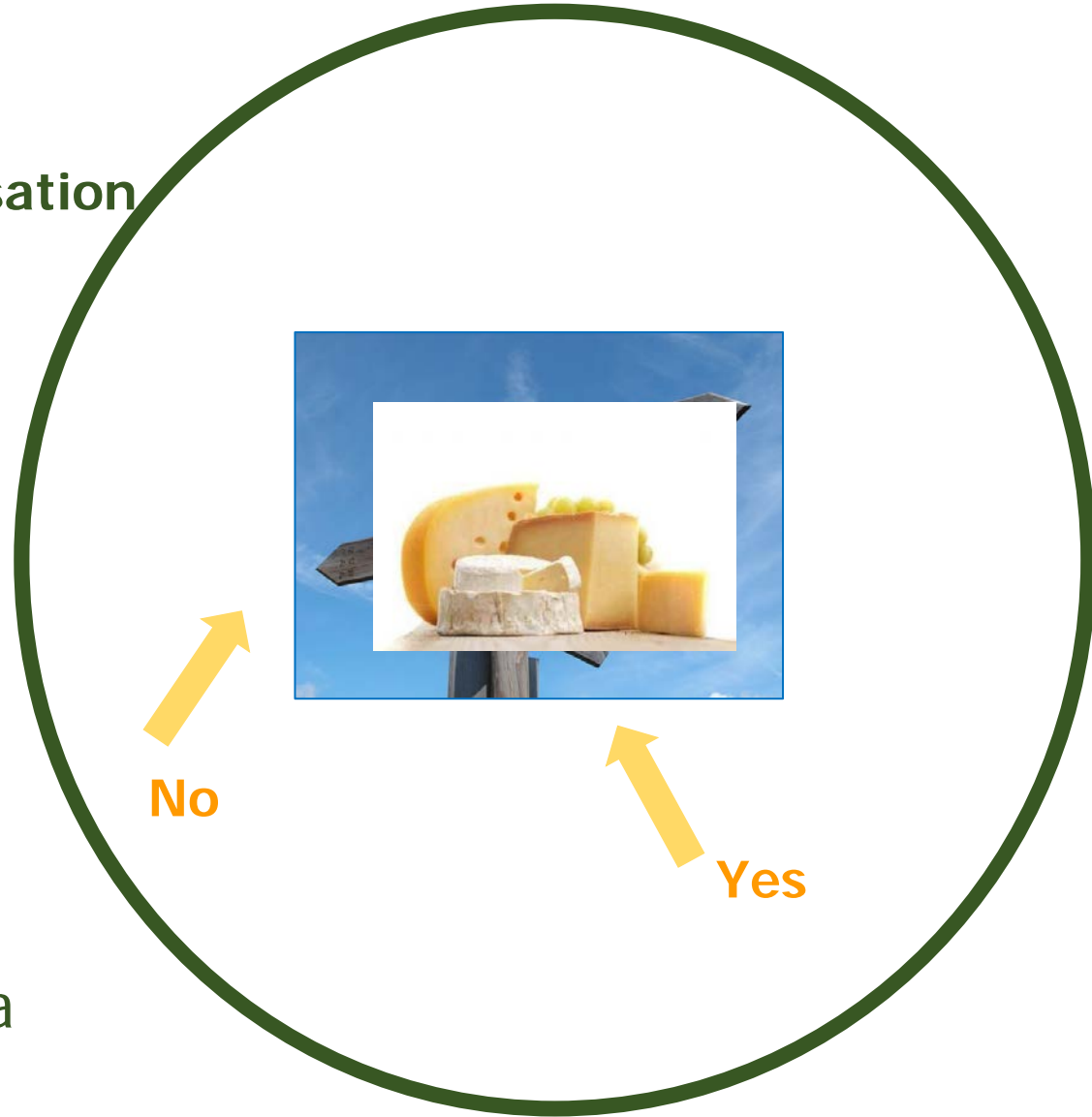
Results & Discussion



Conclusions

Dairy production
alternative valorisation

Farms
characteristics
- Labour force
- Agricultural area



Context



Objectives



Data & Analyses



Results & Discussion



Conclusions

Diversification

- Farms characteristics
- Labour force
 - Agricultural area
 - Year of installation
 - Animal production

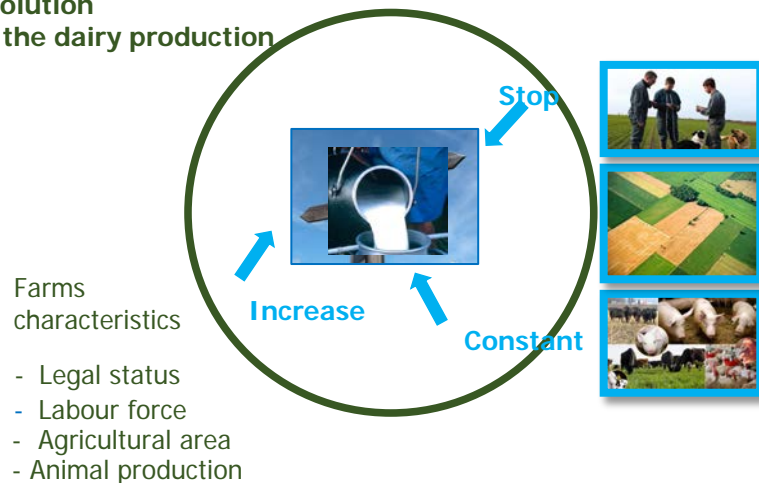


Take home message

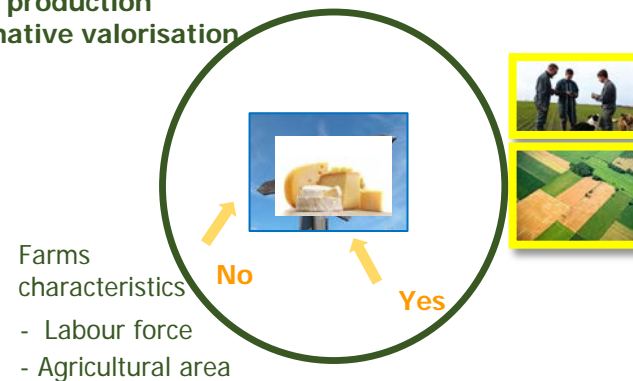
The strategies chosen by the breeders to face to the uncertain dairy future are multiple.

The choice of this strategies is related to the farm characteristics

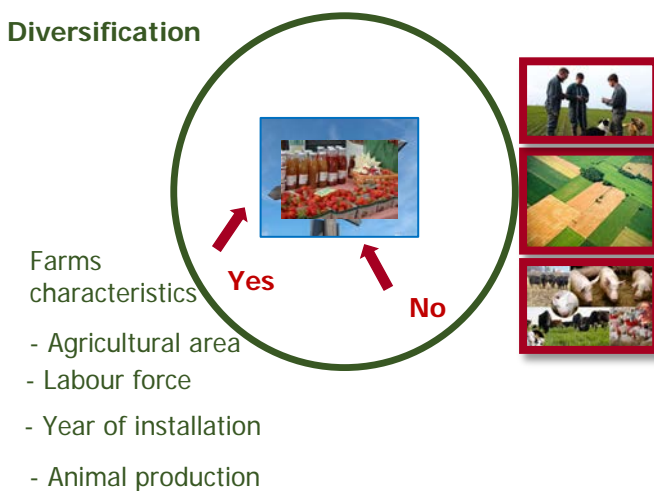
Evolution of the dairy production



Dairy production alternative valorisation



Diversification



Acknowledgement

- Data



Gembloux Agro-Bio Tech
Université de Liège



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- Financial support



Thanks for your attention!

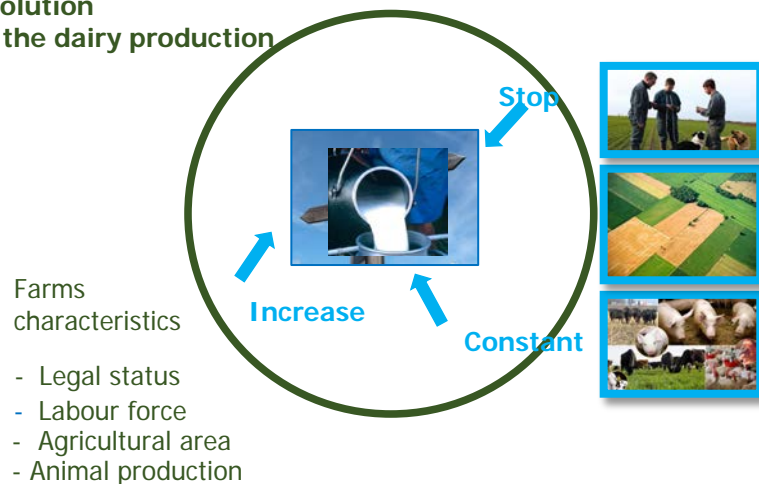
Mail : anne-catherine.dalcq@ulg.ac.be

Take home message

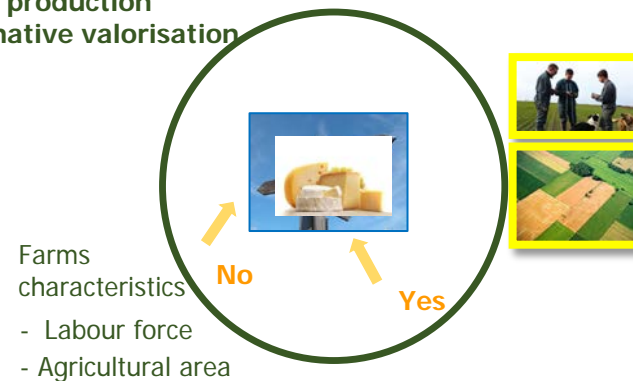
The strategies chosen by the breeders to face to the uncertain dairy future are multiple.

The choice of this strategies is related to the farm characteristics.

Evolution of the dairy production



Dairy production alternative valorisation



Diversification

