

Network, Guidelines, Certification,

Milking control operation: A very important tool for the development of dairy cattle breeding in Morocco

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Since 1975 national dairy plan, Morocco took actions to improve the genetic of cattle breeding.

The actions consisted on the heifer importation operations, the popularization of the artificial insemination on the local breed and moreover, the development of the milking control activity. Started with state farms and reached the private farms later, this last activity Carried out at the beginning by the regional services of the Ministry of Agriculture

The main objective of this activity was the local production of purebred heifers.

to be ceased since 2006 to the professional organizations,

With the outbreak of mad cow disease in Europe in 2000, the heifer's importation stopped. Thus, to substitute the importation, the government launched local heifer's production in cattle farms under milking control operation. This activity has been reinforced by the genetic improvement actions contained in the Green Morocco plan strategy launched in 2009.

This activity has evolved through several steps summarized as follows:

- 1968: launch of dairy control for the first time in cattle farms managed by a state company and then extended to private dairy farms in two irrigated areas (Gharb and Doukkala).
- 1973: opening of the standard genealogical books for the four breeds at the Ministry of Agriculture: Holstein, Pie Noire, Pie Rouge and Tarentaise
- In the 1980-1990 decade until the end of 2000: the number of farms under milk control decreased from 390 farms for 11,000 dairy cows to 120 farms for 5,000 controlled dairy cows, respectively.
- Since 2000, because of mad cow disease outbreak in Europe, heifer's importation
 was stopped. Meanwhile, the cattle farms under milking control operation launched
 local heifer's production.
- From 2000 to 2008, the operation of the dairy control knew an irregular evolution because of shutdown of some farms and the opening of new farms.
- Since 2009, the Green Morocco plan has been introduced and the dairy control activity has been strengthened by the following concrete actions:
 - The establishment of an Operational Specifications for the dairy control plan,

Introduction

History of dairy control activity

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- Transfer of the dairy control activity to the professional organizations operated by a ministerial regulations
- Publication of a decree concerning the modalities of public aid for the animal production intensification included heifers production
- Edition of an Operational Specifications related to the organization of the dairy control and to the selection of purebred cattle breeders.

Current situation and development prospects for milk control The Government has accompanied and encouraged the operation of milk control by granting subsidies accorded to local heifer's production. The amount of these subsidies has begun from 1500 DH (140 Euros) in 2008 to reach 5000 DH (450 Euros) during the last 5 years until now. This operation was a great success during the decade 2010 to 2018 with a very positive evolution as can be shown in the following table:

Year	Cattle Farms	Controlled Dairy Cows	Loc ql Selec ted Heifers	imported heifers
2009	200	1500	600	13297
2010	250	2500	1500	26700
2011	300	8000	4300	16500
2012	350	8500	3400	9100
2013	350	9000	4500	8500
2014	400	11000	6000	14000
2015	500	33500	7500	3800
2016	470	33000	8000	13400
2017	644	44500	12000	20300
2018	728	49000	16300	21190

The number of cattle farms under dairy control increased from 200 units and 1,500 cows in 2009 to 728 units (including 14 large farms) and 49,000 cows. The number of selected heifers increased from 600 to 16,300, respectively.

In parallel with this evolution of farms units, the milk productivity has improved to pass for 305 days standard lactations on average from 4000 - 6000 in 2010 to 6000- 7500 liters per dairy cow in 2018.

This evolution shows the success of the milk control strategy, boosted by the Green Morocco Plan, that enhanced local production of heifers in cattle farms. Less acclimated than the local heifers, the imported heifers will see their number decrease since the subsidy granted by the Green Morocco plan for this matter is eliminated in 2019.

Conclusion

In the short term, Morocco intends to focus on the development of national production of heifers in the cattle farms under milk control operation. This strategy helps to create a local market, which meets the needs of the country on heifers, in minimizing heifers importation, increasing the milk productivity and improving the milk quality.

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