



From Sheep to Broilers

Development of Poultry Production around Marsa Matruh, Egypt

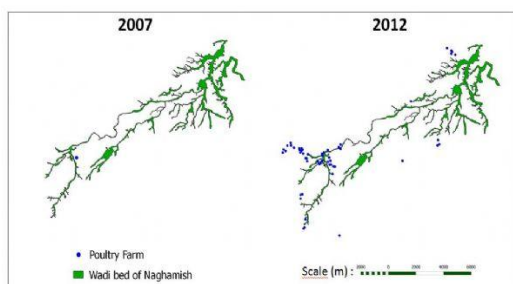


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Following a drought period (1995-2010) in the Matruh region in Egypt and an increase in feed prices, traditional Bedouin sheep production systems based on transhumance on rangelands have incurred a reduction in flocks by 50 to 80%. In the framework of the ELVULMED¹ project surveys in the region of Marsa Matruh have evidenced high capacity of Bedouins to find alternatives of incomes, especially the rapid development of poultry farming.



**Development of poultry farms
in the sector of Naghamish (Matruh, Egypt)**

The production system is based on intensive medium-scale production, with a constant technical model of 5000 broilers in 600m² poultry sheds of local conception. In 10 years the production around Marsa Matruh raised from almost zero to more than 20 million birds / year (illustrated above). It already represents more than 2% of the total Egyptian poultry production. Three feed factories have been built in the last 3 years, while day-old chicks still come from Alexandria or Cairo.

CONCLUSION

The strong and rapid expansion of poultry production units in the Coastal Zone of western desert (Matruh Governorate) and the good performances in term of productivity and mortality have been a surprise for many experts. Four main factors explain this situation: the national market which absorbs all the production; the Bedouin 'quest' in efficient farming systems to face the drought; the lack of specific poultry pathologies in the region; the capacity of the tribe to organization the access to poultry chain. Some other factors have contributed to the expansion e.g. the availability of space for the buildings, the rapid learning of the local labor, and the installation in Marsa Matruh of three feed plants and consultants with skill in poultry production.



**Poultry sheds appearing
on "Google earth" aerial images [2012]**

Short-term profitability of poultry production is high thanks to limited investment (15,000 USD/building), well controlled production costs and low manpower costs. Under good conditions, the return on investment is obtained in less than a year. However, the economic model is highly sensitive to uncontrolled factors such as high feed prices, low broiler selling prices, or even to technical accidents such as high mortality rates in summer. Fortunately, local tribe leaders and their networks strongly support these initiatives.

This example shows how modern poultry farming as a small scale family activity is a way to adapt to the drought conditions of the last 15 years in a context where animal production was previously more extensive and traditional. It is however difficult to estimate its sustainability in this type of environment.

Typical technical and economic performance of poultry farms

TECHNICAL PARAMETERS		Average value
Number of broilers	Nb	5 000
Feed consumption ratio	kg/kg	1.90
Mortality rate	%	5.0
ECONOMICAL PARAMETERS		
Day-old chick price	EGP/chick	2.5
Feed Price	EGP/kg	3.80
Variable costs	EGP/cycle	1 500
Manpower	EGP/cycle	2 000
Building and equipment	EGP/building	80 000
Broiler price at sale	EGP/kg	11.00
INCOME		
Income from sale	EGP/cycle	109 725
Margin on chicks and feeds	EGP/cycle	21 415
Margin on total costs	EGP/cycle	14 715

(1 EGP = 0.15 US\$ on average)



¹ EVULMED project (Livestock and Vulnerability in Mediterranean, funded by the French National Research Agency ANR 2011-2014)
Flash QR code to assess website <http://elvulmed.cirad.fr/>