

Boom of Rabbit Production in Egypt

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Egypt has a rabbit population of approximately two millions rabbits . The population size showed a gradual decrease in the last few years according to the following :

<u>Year</u>	<u>Population size</u>
1975	2,053,000
1976	2,043,000
1977	2,032,000
1978	2,020,000
1979	2,012,000
1980	1,994,000

The majority of these rabbits are bred on a small scale as indigous breeds of small size (1.75 to 3.50 Kg.adult weight) , of lower fertility , poor carcass (50 %) and pure or spotted colours , but well adapted to the prevailing climatic condions allover the country (upper,middle and lower "Delta" of Egypt) .

According to the Central Agency for Public Mobilization and Statistics , temperature in some Governrates represents the Upper , Medium and Lower regions of Egypt is represented in the follwing table (Relative humidity ranged from 50-80%):

	<u>Observatory</u>	<u>Temperature</u>	
	Location	Max.	Min
Cairo	Winter	19.9	9.7
	Summer	34.2	20.8

Fayum	Winter	22.0	7.2
	Summer	37.0	20.5
Alexandria	Winter	19.3	9.8
	Summer	29.9	21.9
Zagazig	Winter	20.1	8.40
	Summer	32.7	20.7
Aswan	Winter	25.8	9.60
	Summer	42.0	24.8
El-Kharga	Winter	24.2	6.0
	Summer	39.6	23.8
Ghardaka	Winter	22.4	10.3
	Summer	33.3	25.0

The local rabbits characterise with their popular and delicious meat . One kilogram of live weight of local rabbits is quoted to be double price that of the corresponding live weight of broiler chicken (100 Fr.) . The deterioration in the rabbit population size in the last few years may be due to disease and hygeinic problems and the imbalanced feed (green clovers,hay,barley and wheat bran) . Rabbit production is based on small scale producers as the herds do not usually exceed 30-4- in number , on a small backyard , or small rabbitries in wooden hutches and extensive house keeping system in open air or confined in farmers houses in the countryside . Research Institute of Animal and Poultry

Production and five stations which are recognized by the Ministry of Agriculture are in existence of partial contribution in rabbit breeding and multipliers for improved strains of rabbits , as breeding does and bucks for the small farmers and the small backyard scale . A amateurs are sharing in this respect with small rabbitries in the urban area and also some institutes used the rabbits in the animal houses for medical and veterinary laboratories .

It is evident that domesticated rabbits are already known in Egypt as local breeds (Lipus sp. : L.timidus, L.aegyptius,L.habessinicus,L.innesi, L.rothschildi) since the ancient Egyptians . Some local breeds were induced by breeding programmes in Cairo University (Giza White) and other breed (Local Red) are considered of meat type rabbits . This was followed by special importations of commercial foreign breeds such as Flemish Giant , Bouscat , Chinchilla and English Spot for meat production and Angora for rabbit wool which is very rare . All these breeds are raised in small , non-intensive production systems .

Large scale production is just beginning in Egypt where a considerable amount of rabbit meat is sold as a popular meat. In such area of high human population growth , and limited cultivated space particularly ; rabbits could help to alleviate the shortage of animal protein which after exists. The ability of rabbits to utilise fibrous cellulose-based feedstuffs not suitable for human consumption , their convenient size and relatively high productivity make them eminently suitable for this purpose .

Interest from many private breeders started raising up simultaneously on large scale basis of 1000 , 500 , 200 , 100 prefabricated rabbitries . More and more people turn to rabbit for the table mainly , as they find its succulence a very palatable change from fowl and other meat and observed the increasing demand for rabbit meat . Dressed and cut-up carcass are sold now in supermarkets in the urban cities .

Commercial production targets as intensive production of 35 to 45 young reared/doe/year (5-7 litters) are achieved , however , lower levels such as the 12-18 young reared/doe/year (3-5 litters) currently being achieved because of : poor feeding , diseases and / or managerial conditions and the potentiality of the breeds . Growth rates of 2 kg. in 10-11 weeks currently being achieved from the hybrids induced from Californian bucks and New Zealand White does and even from the broiler pure-bred rabbits of both the two breeds . The same weight is available from local Red breed at 12-16 weeks of age .

Government support through "Public Development Programmes" participated as grants for different governorate; research Institutes and Universities to encourage the raising and development of rabbit production on intensive house keeping system .

The " small farmer project " in coordination with AID , U.S.A. , and National Development Agricultural Bank also contributed in raising rabbit production in the rural areas through support of loans of low interest , different cage

arrangements and good bucks and does of Flemish Giant , Bouscat , New Zealand White and / or Californian strains under the supervision of veterenary and extension service and supplemnt of pelleted ration .

A project of new scientific approach , was carried out by a research team of Ain -Shams University , Faculty of Agric. ,Cairo through "University Linkage Project" with partenership of American Colleagues to induce new hybrids from crossing Flemish Giant X New Zealand White . The team practised the ovulation promoters , artificial insemination techniques ,special hanging wooden cages in open windowed houses of natural ventilation .Nine -litters were available/ doe/year and 2 kg . broiler rabbits of 8 weeks of age with a total dressed meat yield equal two times the meat yield from one broiler chicken parent dam . Standard rations are formulated to overcome the nutrient requirements for breeding and fattening rabbits according to the avoillable feedstuffs prevailing in the country .

An up to rabbitry of 200 does capacity has been already erected by the hungarian system of rabbit meat production in Sharkia Governorate as extention service station in the rural area to produce hybrids ( New Zealand X Caliornian ) . Elaboration of feasibility study and project proposal for the implementation of new large -scale rabbit farm and for the organization of the connecting network of small producers took place in this farm . Adaptation of the know-how of the well-proved production system to the local conditions, management of rabbit farms and training their staff are

evident in this project . This extension service farm is a start for a fullintegrated large scale farm of 10 thousands does with a connecting network of 10-50 . Doe small scale farms . The large scale farm comprises breeding stock , feedmill for pellets , slaughter house and meat processing and skin processing plants and cold storage and marketing and transportation centres .

Main traits of the slaughter and breeding rabbits produced by crossing between Californians and New Zealander strains can be summarised as follows :

colour	white
average adult weight	4.5 kg / head
Litters/year	6
annual crop	45 heads
marketable table rabbits	38 heads
average weight of a broiler rabbits at 90 days of age	2.5 kg
Feed conversion (kg feed/1 kg weight gain)	3.6 kg

The rabbit houses is air conditioned provided with equipments comprises cages made of steel wire -mesh of double deck vertical system , feeding and drinking facilities .

A National long term project (4 years )was supported and coordinated between the Academy of Scientific Research and Technology and University of Zagazig and established at Faculty of Agriculture ,Agriculture Research Centre , Dept. Anim .Prod . in 1984 . The objective of this project as a pilot unit is to carry out applied research in breeding (as a

central breeding station ) :husbandry ,feeding ,physiology; disease control , and marketing based on locally available materials ingredients . Extension services for the training of local farmersand small stock producers are considered . Breeding does and bucks should be distributed from the project centre and multiplied at the small farmers rabbitries to emphasize the role of the village as an essential productive tool rather than only consumers . Staffmembers from Zagazig University , Faculty of Veterinary Science , Research Institute of Animal and Poultry Production and - National Research Council are partipating in the researchwork plans of this project . The capacity of the two - floor building is 300 does breeding stock with their bucks and their progenies .The housing is provided with Italian and local cages ,natural ventilation and electric fans , ground sided bits , artificial light pannel and a network of water pipes to provide the nipples with plane water . The building comprises nutrition , physiology and diagnostic lab. The first floor for breeding stock and the second floor for the experimental and applied research of nutrition , husbandry , physiology and disease control ; mangement and economic investigations with sub-principal investigator for each team. Progress reports , scientfic papers , and proceedings will be published and a symposium and a workshop will be held . The role of the project in raising and developing rabbit production in the countryside is emphasized as one of the major objectives as well as the production of new improved

strains as a result of selection programmes . The extension service for intensive rabbit production is considered .

One of the private companies of food security ( Al Barari Investment Co. ) has already erected (1985) a full integrated project for commercial meat rabbit production at Ismailia Governorate with a capacity of 10 , thousand does on three phases schedule started with 3300 does . The prefabricated houses and equipments were imported from one of the Spanish companies . The objective of the Egyptian company is to produce rabbit meat and rations as a major product and the breeding rabbits as a minor product for the small scale producers and multipliers .

It can be concluded that rabbit industry on intensive production and up-to-date basis is raising up simultaneously either on large scale or on a small scale in natural or air-conditioned rabbitries . The objective and the prospect of developing this industry in Egypt is to introduce improved strains to the farmers in the village and to market pronounced quantity of rabbit meat in the local markets to overcome the rapid demand of this popular meat at a reasonable price . The first National Conference about "the future of rabbit industry in Egypt" was held at April , 1987 in Canal El-Suess University in coordination with Academy of Scientific Research & Technology and Al Barary Invest.Comp. The second one will be held at September , 1988 at Zagazig University in coordination with Egyptian Society of Poultry and Al Barary Invest. Comp.



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**Summary**

The existing situation of rabbit production is described concerning the rabbit population size, breeds; housing, diseases are reported. Prospects for the development of a significant rabbit industry in Egypt are discussed.

Particular attention is paid to advances in husbandry, disease control and the role of imported breeds in achieving production targets.

