Strategy of lifting up small or medium scale rabbit farming into an industrial type enterprise, with a special reference to developing countries

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Main target of the different types of rabbit production

Small & medium scale farming

- rabbit meat for breeder's family
- some rabbits for the market (cash income)
- organic fertilizer for the farm
- buffer to face unexpected difficulties of the farm or of the family

Industrial farming

• RABBITS FOR THE MARKET

(a job => income)





One only target

The different types of production possible with rabbits



MEAT



FUR



Purebred for SHOWS



WOOL



PETS

For an industrial production => ONLY ONE TARGET

For this lecture

RABBIT MEAT PRODUCTION







Mixture between meat and pet production should be PROHIBITED

These 2 productions are conflicting

EVALUATION of the INITIAL SITUATION

Basic hypothesis: in a known area some or many farmers produce meat rabbits. They want to produce these rabbits at an industrial scale WHAT WOULD BE THE STRATEGY?

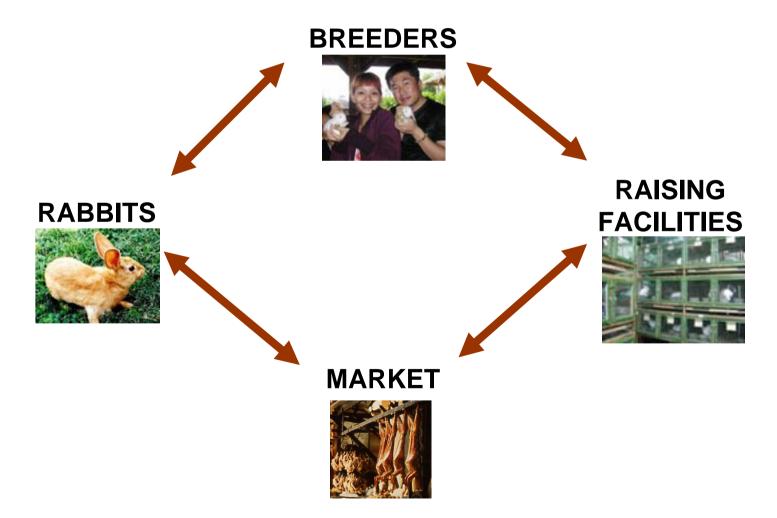
Before to propose any type of modification, it is necessary to evaluate the situation in relation with 2 main points:

1/ description and determination of productivity of the **existing systems**

2/ elaboration of a fine description of the **technical and economical environment** of the **rabbit farms**, and particularly of the real ability of the market to absorb the production.

Rabbit production system has 4 main basis,

All 4 must be evaluated



A photography of the present situation

The most important point is to determine during a visit :



- the real motivation of each breeder for rabbit production
- his will to change something in his production habits

At the occasion of this visit, the description of the setting up of each production unit should be noted in details

For a group of breeders 3 key points necessary to go to the industrial level

the creation of an enterprise by lifting up the existing small and / or medium scale units of production could be viewed with confidence only if all farmers of the group share **the same ideal** which could be summarized in 3 key points:

- 1 Autonomy in decision: a group managed by producers in the interest of the producers themselves. Any project with an external centre of decision has very few chances to succeed.
- 2 Solidarity between members of the group, to create a common project, a common enterprise.
- **3 Training of the farmers:** by exchange between farmers and progressive inclusion of new techniques or management methods observed outside of the group, the whole group will progress

For a group of breeders 3 key points necessary to go to the industrial level

In few words,

the group has to work for itself, but with eyes widely open on the exterior of the group

Determination of each farmer of the group to follow up these 3 key points MUST be determined during the initial step of evaluation

The 3 key points for the creation of an industrial enterprise

The initial scale of the breeding units is of few importance if the breeders are well motivated in the success of their production

Some performances obtained in one year by small Egyptian farmers and by a large production units, both utilising the same type of rabbits, the same feeds and the same general management (according to Ibrahim et al., 2000)

Parameters	Small holders ¹	Large unit ²	Signification
Kindlings per doe and per year	6.74	5.66	**
Matings per kindling	1.60	1.67	ns
Born alive per litter	6.32	5.58	**
% birth to weaning mortality	14.9%	24.8%	**
Weaning weight (g) at 30 days	573 g	512 g	**
Slaughter rabbits at 90 d. /doe & /year	37.9	25.6	**
• Live weight produced /doe & /year (kg)	71.7	45.4	**

¹ small holders N= 30 (90 does in total)

² large scale rabbitry N = 1 (90 does in total)

The 3 key points for the creation of an industrial enterprise



A success story in France for group of breeders

1981

11 breeders

+ 1 half time technician

3200 rabbit does

176 000 slaughter rabbits produced during the 1rst year of activity

2008

220 breeders + 45 employees

135 000 breeding does (x 42)

7.5 millions slaughter rabbits produced / year

1 centre for artificial insemination (30 000 doses per week)

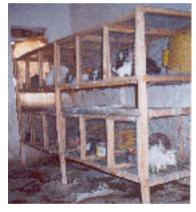
1 centre for selected rabbit lines multiplication (3000 does per week)

participation in 2 big rabbit slaughter and commercialization enterprise

Their secret? a strict application of the 3 keys points

A photography of the present situation

- number of reproducing males and females
- rabbit's housing (cages, buildings, ...)









• genotype / phenotype of the rabbits









A photography of the present situation

• normal management of the rabbitry: delay kindling-mating, weaning age, age at first mating, weight and age at slaughter time.

first mating, weight and age at slaughter time, ...

• type of feeding and watering, use of forages, feed's origin, ...



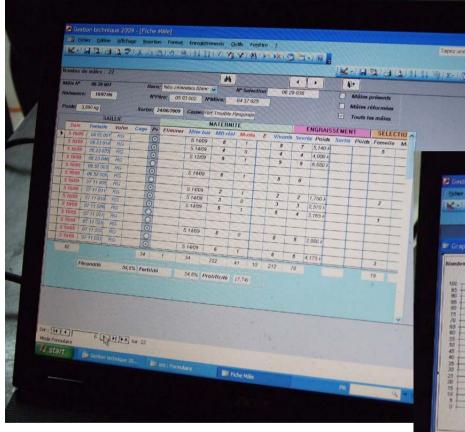


time spent per day and /or per week in the rabbitry management.
 Who is working in the rabbitry, daily, occasionally?

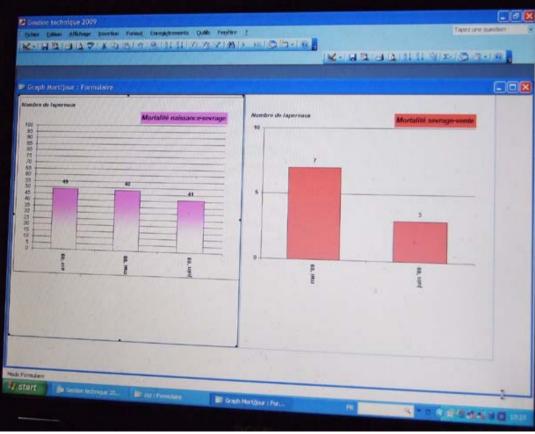
Measure of rabbitry productivity: recording data / month, during 1 year

- 1 number of adult rabbit present at the beginning of each calendar month (males and females separately)
- 2 number of **young adults introduced** in the rabbitry during the month and the number of adults culled or dead
- 3 number of matings and of kindlings during the month
- 4 if possible the number of **young born alive during the month** (addition of kits born in each litter),
- 5 number of **young weaned during the month** with indication of the variability and average real age at weaning,
- 6 if possible the average weight of weaned rabbits, but it is not essential,
- 7 number and total weight of young rabbit sold per month (or eaten by the family) and if possible the price and the age of young rabbits

Points 1 and 7 are the most important



A computer is very useful to calculate the production parameters from the data recorded in the different farms



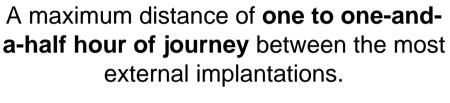
EVALUATION of the INITIAL SITUATION

Before to propose any type of modification, it is necessary to evaluate the situation in relation with 2 main points:

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A limited geographic area for the group homogeneity in order to facilitate meetings and contacts



Distance in km depends of the road quality and type of transport generally used













EVALUATION of the INITIAL SITUATION

The other aspects concern the possibilities and access to the different supplies and conditions of access to the market. Here the list is long. Some important points:

- Are fresh or preserved vegetables or forages available, natural or cultivated?
- Competition with the other animal production for the access to theses forages?
- Other local feed resources (agricultural or agro-industrial by-products)?
- Are specific rabbit pelleted feeds locally available?, quality, price "acceptable"?
- Are the roads of good quality?
- Is electricity available for all farmers: power, regularity, ...at which cost ?
- Are available drugs specific for rabbit production and rabbitries disinfection?
- Are extra workers available in the village for some specific tasks in the rabbitry?
- What is the "normal" presentation of rabbits when sold: alive, in carcasses?
- Are one or some rabbit slaughterhouses in activity in the region?
- Are the rabbit presently sold by farmers at home, at a local market?
- Is their some purchasers which come to collect rabbits directly from the farmers?
- Etc, etc, etc ...

First step: Lifting of the group's organisation

The target is to practice collectively for the group

- most of the buying activities
- all selling activities.

Examples of buying activities => lower prices and transport costs, ensured quality

- Pelleted feeds or raw material
- Medicines, disinfectants and cleaning products
- Improved selected rabbits

Examples of collective commercialization of (all) rabbits produced

- at minimum, rabbits of all farmers are sold at the same price
- signature of contracts with one or some buyers with determination of prices and quantities / time unit
- regular collection of rabbits ready for slaughter from each producer and to sell them together to one or more purchasers

An industrial enterprise could be characterised by the **regular quality** of its production and by its ability to adapt this production to the market's demand.

=> **produce what is quite still sold in advance** and no to try to sell a production only because it arrives at its final step.

An industrial production means also an homogenous and regular high quality production. This implies a regularity of each breeder methods of production mainly for rabbits age and live weight at slaughter time.

Most generally this homogenization of the final product implies also an homogenization of the production methods used by all breeders of the group.

The group must be able to know it's the production in advance and to be able to adapt this production to foreseeable fluctuations of the market. To attain this target an efficient and frequent recording of production data is necessary.

1- Technicians and technical work

Technicians functions during visits in farms

- To deliver some individual technical advice when necessary
- Recording of all technical-economical parameters listed above
- To present and discuss with the farmer the analysis of his previous data

Other functions of technicians

- To analyse, compare and synthesise performance data of all farms of the group
- To discuss these results first with group's staff, and regularly (every 2-3 month) with the farmers during a common meeting (general or section's meetings). It would be the occasion to point out the better and the worst results and techniques.

1- Technicians and technical work: new methods promotion

The points that could be improved following visits and/or meetings depend widely of the initial situation and of the technical level of farmers. Some examples

- the **quality of the equipment**, *e.g.* modification of the cage floor for a more suitable one, introduction and utilisation of feeding racks for forages, ...
- the quality of material management, e.g. quality of cage cleaning, of disinfections...
- the **reproduction management**, *e.g.*, grouping of mating in only one or two consecutive days per week which implies grouped kindlings and weanlings, and more, makes possible the adoption of newborn kits between litters and the equalization of litters.
- an improvement of **airing and ventilation of the buildings**, or utilisation of open—air systems could be proposed and tested.

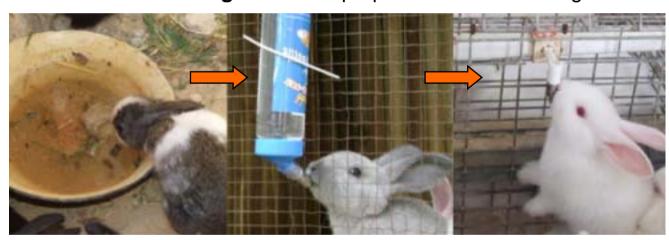
1- Technicians and technical work: new methods promotion (continuation)

- the adoption of controlled and coordinated distribution of pelleted feed and forages.

- a **formation of farmers on the nutritive value** (energy, proteins, fibre, ...) of the different forages and by-products locally available, ...

- the **promotion of automatic watering** in order to propose to rabbit drinking water of

better quality



- a formation of farmers to a **early diagnostic of the most prevalent rabbit diseases** in the area, and indication of appropriate interventions, ...
- etc, etc ... the list is quite infinite.

2 - Sale and marketing person, commercialisation

The person in charge of the commercialisation of the rabbit **is the keystone** of the enterprise.

His work consists in the research a permanent appropriateness of the market demands for rabbits to the possibilities of production of the enterprise, and vice versa

At the occasion of the payment of the rabbits sold, the enterprise must take some small (but justified) percentage of the transaction. It would be the main source or frequently the only source of financing of the enterprise to pay it's employees (technicians ...) and to finance the general investments make for the community

This commercial responsible has also to return to the farmers the remarks made by the real or potential buyers about the quality or quantity of the product

DAILY NATION

The Daily Nation is Kenya's leading newspaper and is a product of Nation Media Group (NMG) Limited

Rabbit much more than a hobby

A success story in Kenya



The rabbits being prepared for the market. Photo/DANIEL SITOLE

By DANIEL SITOLE Posted Wednesday; April 29 2009 at 16:57 extract

Seventy small-scale farmers, from four villages in Gilgil a few kilometers from Naivasha in the Rift Valley (Kenya) are making a decent income from the processing and sale of rabbit meat. (~2 000 USD /month)

The meat, is mainly sold to the local community in Gilgil and the rest in Nairobi.../... The group processes about 600 kg per month and sells the same at Sh 250 per kg (= 3.26 USD).

"Our members supply the rabbits to the group at Sh 200. Once sold at Sh 250 the group, CIG retains Sh 50 half of which goes into administration and the rest goes to members' dividend account to be paid later in the year. It takes us 14 days to receive payment from customers on credit customers and another 14 days to pay the supplying members," Kihanya said . The group's objectives include increasing output to 2000 kg by the end of the year 2009.

3- Functions of the staff of the enterprise

- General management on the enterprise
- Finalisation of contract and if possible rebates for the different supplies: feeds, selected rabbits, medicines, cages, etc....
- To contact banks to facilitate obtaining of loans for the farmers of the group which present reasonable projects
- Initial evaluation and/or promotion of these projects with the help of group's technicians.
- the staff may also propose to the farmers the inclusion of one part of supply or commercialization activity in the normal activities of the enterprise.

Propositions of the staff for new activities may concern:

- the creation of a centre for artificial insemination

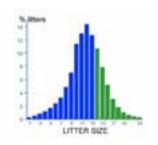






- the establishment of a unit for selection or multiplication of selected rabbits







- the creation of a slaughter house or participation in an existing one







 the creation of a small pelleted feeds plant









CONCLUSION

Yes it's possible to transform a group of farmers working at a small or medium scale into an industrial enterprise

Among the different conditions the most important is the acceptation by all farmers to work together on a really common project

Please keep in mind that this lifting up will be progressive and will need a long time, measured in years not in months. So the determination of farmers must be hard and continuous.

Thanks for your attention



