

RABBIT MEAT PRODUCTION IN THE WORLD.

A PROPOSAL FOR EVERY COUNTRY

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Abstract - Rabbit Meat Production survey has been carried out for the 186 World countries enabling an estimation of the key data of every one and consequently of each region and of the whole World: rabbit meat production, imports, exports, number of does, productivity of the does...Moreover, to eliminate the effect of the size of the countries, certain parameters have been expressed in relation to the number of inhabitants and to the country's gross national product. This data has been divided between 3 types of rabbit farms: traditional, intermediary and commercial. The total world rabbit meat production is estimated as 1.6 millions tons of carcasses. In absolute, the rabbit meat production is concentrated in few big countries (Italy, France, Ukraine, China, Spain, Russia) but is relatively important in the economy of some small countries (Malta) or of some developing countries (Nigeria, Egypt, Ghana, Cape Verde Islands, Sri-Lanka, Morocco, Sao Tome et Principe). Rabbit meat is consumed mainly in the European Latin countries (1.9 to 5.6 kg/inhabitant & /year) and secondarily in some East European countries (1,04 kg/year on average in East Europe). The average World rabbit meat consumption is 0.3 kg/inhabitant & /year. Rabbit meat import-export (5.6% of the world meat production) is dominated by very few countries : China, Hungary, Belgium, Italy, France, United-Kingdom, Germany. Rabbit does in traditional rabbit farms are the more numerous and globally produce 40 % of the meat, even if their productivity is very low : 17.3 kg meat/year compared to 28.8 kg and 54.3 kg for the does in intermediate and commercial farms.

INTRODUCTION

On the occasion of the 5th World Rabbit Congress, a first review of the World rabbit Production was presented (LEBAS and COLIN, 1992). It has been emphasized that the situation of a lot of countries was not very well known, particularly at the level of the structure of this production. Consequently, a second study has been carried out and has enabled a systematic description of the Rabbit Production in 186 countries (COLIN and LEBAS, 1995). In this current work, the key statistical data of such a survey are globally presented including a detail of the production between the different types of rabbit farms and a synthesis per big world regions.

MATERIAL AND METHODS

For every country, the following data have been established:

- Rabbit Meat Production (tons/year): RMP
- Rabbit Meat Exports (tons/year): RME
- Rabbit Meat Imports (tons/year): RMI
- Carcass weights (kg): CW

The difficulty and the method used to establish this data have already been described into details (COLIN and LEBAS, 1995). This one consists in a synthesis of :

- Official statistics.
- Bibliography.
- Accounts of Study Trips.
- Private Companies Data and Statistics.
- 2 international Surveys.

Besides, for each country, the Rabbit Meat Production and the number of produced rabbits/doe/year (PRD) have been valued for the 3 types of rabbit Production:

- Traditional Production (RMPt, PRDt): small farms (less than 8 does), self-consumption oriented, raw ingredients feeding...
- Intermediary Production (RMPi, PRDi): middle farms (between 8 and 100 does), simultaneously self-consumption and commercialization oriented, complement and raw ingredients feeding...
- Commercial Production (RMPc, PRDc): big farms (more than 100 does), commercialization oriented, industrial feeding...

In some cases, very few information is available regarding the production structure and its analysis has been carried out only by analogy with the neighboring countries. Each criteria is presented for every individual country and for the big geographical regions.

The following parameters have been calculated utilizing the basic data and the number of inhabitants (NH), the total gross national product (TGNP) (CORDELIER et DIDIOT 1994) and the international trade price of the frozen rabbit meat (3 300 US \$/Ton).

- Total number of does: TND.
- Average rabbit meat consumption per inhabitant (kg/year): RMC.
- Number of does per inhabitant: NDH.

"Rabbit GNP" as US \$ per 1000 US \$ of total GNP : RGNP according to the following formulas:

- ◇ $TND = (RMPt \times 1000) / (PRDt \times CW) + (RMPi \times 1000) / (PRDi \times CW) + (RMPc \times 1000) / (PRDc \times CW)$
- ◇ $RMC = (RMP + RMI - RME) / NH$
- ◇ $NDH = TND / NH$
- ◇ $RGNH = (RMP \times 3\,300) / (TGNP)$

RESULTS AND COMMENTS

1. Meat production and number of does per country (Table 1)

For most of the countries, the previous values (COLIN and LEBAS, 1995) are confirmed and no changes proposed.

The only differences are the following countries according to CHALAH et HAJJ (1996), GALAL et KHALIL (1994); SFEROPOULOS (1995); COLIN *et al.*(1996).

- A new estimation of the Rabbit Meat Production for Egypt (38 000 tons/year), Greece (9 000 tons/year), Hungary (12 000 tons/year), Lebanon (150 tons/year).
- A new estimation of the Rabbit Meat Imports for Italy (23 000 tons/year), Switzerland (3 400 tons/year).
- A new estimation of the Rabbit Meat Export for Hungary (12 000 tons/year).

As previously observed, the Rabbit Meat Production is concentrated in few countries:

- The 6 countries producing more than 100 000 tons/year (Italy, France, Ukraine, China, Spain, Russia) represent 58 % of the World Meat Production.
- The 17 countries producing more than 20 000 tons/year (The previous ones plus Indonesia, Nigeria, Egypt, USA, Germany, Belarus, Belgium, Poland, Morocco, Portugal, Czech Republic) represent 80 % of the World Production.

Globally, West Europe is the main rabbit meat producer (43 %) followed by East Europe (24 %) and Far East Asia (14 %). North Africa and Middle and South Africa represent each one between 5 and 10 % of the World Rabbit Production (table 2).

Table 1 : Technical and economical data on rabbit meat production in each of the World's countries (part 1)

COUNTRY	Product. 000 t	Exports 000 t	Imports 000 t	No females 000	Consom. kg/inhab.	No of females 1000/inhab.	Value \$/1000 \$ of TGNP
AFGHANISTAN	.01	.00	.00	1	.006	.05	.004
ALBANIA	3.00	.00	.00	127	.909	38.38	3.779
ALGERIA	15.00	.00	.00	1043	.583	40.56	1.047
ANGOLA	1.00	.00	.00	60	.097	5.79	.550
ANTIGUA	.03	.00	.01	2	.500	20.83	.275
ARGENTINA	4.00	.05	.00	119	.121	3.63	.173
ARMENIA	1.00	.00	.00	65	.294	19.23	.398
AUSTRALIA	.20	.00	.00	4	.012	.22	.002
AUSTRIA	1.50	.00	1.00	72	.320	9.15	.031
AZERBAIDJAN	10.00	.00	.00	679	1.408	95.70	2.409
BAHAMAS	.05	.00	.00	3	.200	10.55	.057
BAHREIN	.03	.00	.00	1	.057	1.72	.027
BANGLADESH	1.00	.00	.00	81	.008	.68	.148
BARBADOS	.10	.00	.02	5	.462	20.98	.196
BELARUS	30.00	.00	.00	1341	2.913	130.22	2.683
BELGIUM	25.00	10.30	11.00	553	2.612	56.21	.434
BELIZE	.01	.00	.00	<1	.053	3.03	.080
BENIN	.20	.00	.00	9	.041	1.94	.363
BHUTAN	.05	.00	.00	5	.032	2.93	.611
BOLIVIA	1.00	.00	.00	64	.131	8.36	.537
BOSNIA	1.50	.60	.00	43	.199	9.41	.629
BOTSWANA ,	.30	.00	.00	13	.222	9.95	.309
BRAZIL	12.00	.05	.00	475.	.078	3.10	.098
BRUNEI	.10	.00	.00	13	.357	44.64	.140
BULGARIA	4.10	.50	.00	154	.400	17.12	.681
BURKINA-FASO	.40	.05	.00	19	.037	1.97	.431
BURUNDI	1.00	.00	.00	43	.178	7.74	2.727
CAMBODGIA	.50	.00	.00	57	.059	6.72	1.941
CAMEROON	.60	.00	.00	26	.049	2.09	.176
CANADA	3.00	.00	3.00	121	.227	4.60	.017
CAPE-VERDE ISLANDS	.40	.00	.00	18	1.053	46.78	3.882
CENTRAL-AFRICA REPUB.	.10	.00	.00	6	.032	1.83	.277
CHAD	.10	.00	.00	5	.017	.92	.308
CHILE	1.00	.00	.00	31	.075	2.33	.111
CHINA	120.00	40.00	.00	6061	.069	5.25	.938
COLOMBIA	8.00	.00	.00	357	.238	10.62	.597
COMOROS	.10	.00	.00	6	.175	10.10	1.375
CONGO	.10	.00	.00	5	.043	2.29	.143
COSTA-RICA	.20	.00	.00	11	.065	3.51	.114
CROATIA	2.00	1.00	.00	55	.213	11.70	.397
CUBA	.50	.00	.00	18	.047	1.65	.101
CYPRUS	3.00	.00	.10	102	4.366	144.10	1.787
CZECH REPUB.	20.00	2.50	.00	597	1.699	57.98	2.529
DENMARK	6.00	3.00	.00	161	.583	31.35	.153
DJIBOUTI	.01	.00	.01	1	.048	1.74	.067
DOMINICAN REPUB.	.30	.00	.00	16	.041	2.24	.169
ECUADOR	1.00	.00	.00	61	.093	5.62	.280
EGYPT	38.00	.00	.00	3235	.696	59.24	3.996
EL-SALVADOR	.33	.00	.00	19	.065	3.70	.189
EQUATORIAL-GUINEA	.01	.00	.00	1	.028	1.98	.243
ERYTHREA	.05	.00	.00	2	.016	.62	.236
ESTONIA	1.00	.00	.00	41	.633	25.79	.569
ETHIOPIA	.10	.00	.01	6	.002	.12	.054
FIDJI	.10	.00	.00	7	.135	9.38	.250
FINLAND	.50	.00	.00	30	.100	6.00	.013
FRANCE	150.00	4.00	10.00	3916	2.756	69.19	.423
FRENCH-GUYANA	.10	.00	.02	5	1.200	54.44	1.222
GABON	.05	.00	.03	2.50	.066	2.07	.045
GAMBIA	.05	.00	.00	2.56	.057	2.91	.640
GEORGIA	1.00	.00	.00	47	.182	8.63	.262
GERMANY	30.00	.00	6.50	1458	.461	18.41	.058
.../...							

Table 1 : (part 2)

COUNTRY	Product. 000 t	Exports 000 t	Imports 000 t	No females 000	Consum. kg/inhab.	No of females 1000/inhab.	Value \$/1000 \$ of TGNP
.../...							
GHANA	7.00	.00	.00	310	.451	20.00	3.969
GREECE	9.00	.00	.10	203	.899	20.01	.457
GRENADA	.04	.00	.01	2	.556	25.25	.660
GUADELOUPE	.20	.00	.20	6	1.143	18.48	.319
GUATEMALA	.60	.00	.00	31	.063	3.26	.220
GUINEA	.25	.00	.01	14	.044	2.41	.267
GUINEA-BISSAU	.10	.00	.00	5	.102	5.44	1.650
GUYANA	.10	.00	.00	8	.123	10.48	1.138
HAITI	.30	.00	.00	23	.045	3.40	.413
HONDURAS	.36	.00	.00	20	.068	3.88	.393
HONG-KONG	.01	.00	1.00	1	.173	.13	.001
HUNGARY	12.00	12.00	.70	275	.067	26.11	1.303
INDIA	7.50	.00	.00	367	.009	.44	.084
INDONESIA	50.00	.10	.00	2698	.273	14.78	1.415
IRAK	.10	.00	.00	9	.005	.47	.005
IRAN	.01	.00	.00	1	.000	.02	.001
IRELAND	1.00	.20	.00	36	.227	10.15	.0747
ISLAND	.05	.00	.00	3	.192	12.82	.027
ISRAEL	.10	.00	.00	9	.020	1.77	.006
ITALY	300.00	.65	23.00	7376	5.587	126.81	.923
IVORY-COAST	1.00	.00	.10	38	.088	3.05	.370
JAMAICA	.50	.00	.00	26	.204	10.43	.399
JAPAN	1.00	.00	3.00	40	.031	.31	.001
JORDANIA	1.00	.00	.20	80	.290	19.40	.773
KAZAKSTAN	3.00	.00	.00	201	.179	11.97	.384
KENYA	1.00	.00	.00	42	.039	1.63	.368
KOWEIT	.10	.00	.10	3	.091	1.38	.010
KYRGHYSTAN	1.00	.00	.00	69	.227	15.73	.429
LAOS	.50	.00	.00	57	.117	13.30	1.941
LATAVIA	1.50	.00	.00	60	.560	22.46	.476
LEBANON	.15	.00	.10	12	.091	4.28	.396
LESOTO	.10	.00	.00	5	.055	2.65	.397
LIBERIA	.03	.00	.00	2	.011	.85	.080
LITHUANIA	2.00	.00	.00	8	.529	22.05	.584
LUXEMBOURG	.20	.00	.65	5	2.237	14.04	.075
LYBIA	1.50	.00	.00	71	.319	15.15	.212
MACAO	.01	.00	.10	1	.220	1.52	.011
MACEDONIA	1.00	.40	.00	35.	.282	16.51	.892
MADAGASCAR	.50	.01	.02	30	.044	2.56	.623
MALAWI	.60	.00	.00	36	.070	4.19	.990
MALAYSIA	9.00	.00	.10	494	.501	27.18	.626
MALDIVES	.01	.00	.00	1	.045	3.79	.330
MALI	.10	.00	.00	6	.012	.76	.136
MALTA	3.20	.00	.00	110	8.889	306.88	4.310
MAROCOCO	20.00	.00	.00	992	.779	38.66	2.465
MARTINIQUE	.20	.00	.20	6	1.081	17.48	.253
MAURITANIA	.01	.00	.00	1	.005	.38	.030
MAURITIUS	.15	.00	.05	6	.187	5.42	.188
MEXICO	15.00	.00	1.00	1018	.182	11.60	.190
MOLDAVIA	1.00	.00	.00	65	.227	14.86	.317
MONGOLIA	.01	.00	.00	1	.004	.36	.019
MOZAMBIQUE	1.50	.00	.00	65	.093	4.73	4.304
MYANMAR	3.00	.00	.00	363	.071	8.54	.604
NAMIBIA	.20	.00	.02	14	.120	7.53	.342
NEPAL	1.00	.00	.00	69	.052	3.59	1.003
NETHERLANDS	10.00	3.75	3.70	225	.661	14.92	.119
NEW-CALEDONIA	.05	.00	.05	2	.556	9.33	.074
NEW-ZEALAND	.30	.00	.00	6	.089	1.73	.023
NICARAGUA	.30	.00	.00	17	.075	4.33	1.100
NIGER	.10	.00	.00	6	.013	.81	.138
NIGERIA	50.00	.00	1.00	2107	.455	18.79	5.275
NORTH-KOREA	1.00	.00	.00	77	.045	3.47	.172
.../..							

Table 1 : (part 3)

COUNTRY	Product. 000 t	Exports 000 t	Imports 000 t	No females 000	Consum. kg/inhab.	No of females 1000/inhab.	Value \$/1000 \$ of TGNP
.../...							
NORWAY	.50	.00	.05	28	.129	6.65	.016
OMAN	.20	.00	.00	13	.128	8.55	.064
OUGANDA	.40	.00	.00	17	.021	.86	.346
OUZBEKISTAN	3.00	.00	.00	200	.145	9.66	.465
PAKISTAN	3.00	.00	.00	255	.026	2.21	.227
PANAMA	.15	.00	.00	8	.061	3.26	.098
PAPUA-NEW-GUINEA	.01	.00	.00	1	.003	.15	.009
PARAGUAY	.50	.00	.00	19	.114	4.33	.344
PEROU	4.00	.00	.00	207	.182	9.42	.525
PHILIPPINES	18.00	.00	.10	1609	.288	25.59	1.352
POLAND	25.00	6.00	.00	867	.497	22.67	1.281
PORTO-RICO	1.00	.00	.20	36	.333	10.12	.146
PORTUGAL	20.00	.00	.50	702	1.938	66.39	1.084
QATAR	.03	.00	.00	1	.058	1.78	.013
REUNION	.40	.00	.44	13	1.400	21.49	.395
ROMANIA	16.00	1.00	.00	604	.643	25.87	1.388
RUSSIA	100.00	.00	.00	4246	.673	28.59	.602
RWANDA	1.50	.00	.00	65	.202	8.76	2.500
SALOMON ISLAND	.05	.00	.01	4	.182	12.63	.868
SAMOA	.03	.00	.01	2	.235	12.25	.825
SAO-TOME-&-PRINCIPE	.07	.00	.00	3	.583	23.61	5.372
SAUDI-ARABIA	.80	.00	.20	24	.065	1.57	.023
SENEGAL	.60	.00	.03	26	.084	3.47	.347
SERBIA	3.50	1.50	.00	118	.190	11.19	.472
SEYCHELLES	.02	.00	.00	1	.286	16.45	.184
SIERRA-LEONE	.03	.00	.00	2	.007	.54	.101
SINGAPOR	.01	.00	1.00	1	.333	.24	.001
SLOVAKIA	10.00	.50	.00	338	1.792	63.80	2.946
SLOVENIA	2.00	.50	.00	56	.769	28.82	.577
SOMALIA	.01	.00	.00	1	.001	.08	.035
SOUTH-AFRICA	4.00	.00	.10	131	.114	3.64	.128
SOUTH-KOREA	2.00	.00	1.20	73	.074	1.69	.024
SPAIN	120.00	.50	3.50	3864	3.152	99.02	.803
SRI-LANKA	7.00	.00	1.00	322	.465	18.72	2.640
ST-LUCIA	.06	.00	.01	3.	.467	22.22	.683
SUDAN	2.50	.00	.00	220	.096	8.49	1.052
SURINAM	.10	.00	.00	8	.233	19.73	.241
SWAZILAND	.10	.00	.00	5	.125	5.86	.478
SWEDEN	.50	.00	.00	30	.058	3.47	.007
SWITZERLAND	3.00	.00	3.43	147	.947	21.60	.046
SYRIA	3.00	.00	.10	236	.247	18.82	.798
TADJIKISTAN	1.00	.00	.00	69	.185	12.82	.569
TAIWAN	1.00	.00	.00	43	.049	2.15	.018
TANZANIA	.60	.00	.00	25	.023	.95	.678
THAILAND	18.00	.00	.00	1028	.310	17.72	.660
TOGO	.10	.00	.00	4	.027	1.19	.212
TONGA	.01	.00	.00	1	.111	7.72	.330
TRINIDAD-&-TOBAGO	.40	.00	.05	21	.360	16.61	.253
TUNISIA	4.00	.00	.00	210	.479	25.16	1.023
TURKEY	1.00	.00	.00	46	.015	.69	.036
TURKMENISTAN	1.00	.00	.00	69	.270	18.71	.525
UKRAINE	150.00	.20	.00	4958	2.886	95.53	3.252
UNITED-ARAB EMIR.	.10	.00	.10	3	.123	1.87	.010
UNITED-KINGDOM	8.00	.20	9.00	266	.292	4.62	.027
URUGUAY	1.00	.20	.00	31	.257	9.95	.416
USA	35.00	2.00	3.00	2422	.142	9.56	.020
VANUATU	.02	.00	.00	1	.133	9.26	.388
VENEZUELA	6.00	.00	.00	367	.297	18.12	.370
VIETNAM	7.00	.00	.00	545	.103	8.05	3.240
YEMEN	.50	.00	.00	33	.043	2.85	.204
ZAIRE	1.50	.00	.00	70	.041	1.90	.610
ZAMBIA	1.00	.00	.00	47	.119	5.61	.875
ZIMBABWE	1.00	.00	.00	54	.104	5.59	.601

Table 2 : Technical and economical data on rabbit meat production in the world's great regions

World's Regions (1)	No of Countr.	Product. 000 t	Exports 000 t	Imports 000 t	Number of Does 000	Consum. kg/inhab & /year	No Does /1000 inhab.	Value Product. \$/1000 \$
AFRICA North	7	81.01	0.00	0.00	5 772	0.551	39.26	1.774
AFRICA Middle & South	47	78.53	0.06	1.82	3 387	0.155	6.55	0.991
AMERICA North	2	38.00	2.00	6.00	2 544	0.150	9.11	0.020
AMERICA Central	21	20.63	0.00	1.70	1 232	0.148	8.57	0.191
AMERICA South	13	38.80	0.30	0.02	1 753	0.127	5.79	0.192
EUROPE East	19	385.60	26.70	0.70	14 063	1.036	40.53	1.234
EUROPE West	20	691.45	22.60	72.53	19 228	1.958	50.78	0.324
ASIA Middle East	18	20.12	0.00	0.80	1 334	0.095	6.06	0.107
ASIA Central	12	27.57	0.00	1.00	1 640	0.024	1.39	0.206
Asia Fare East	18	231.14	40.10	6.50	13 159	0.108	7.20	0.164
OCEANIA	9	0.77	0.00	0.07	27	0.032	1.04	0.007
WORLD Total or Mean	186	1 613.62	91.76	91.14	64 200	0.301	11.94	0.243

(1) for countries distribution within regions, see COLIN and LEBAS (1995)

The same trends are observed for the number of does:

- The 7 countries with more than 3 million does (Italy, China, Ukraine, Russia, France, Spain, Egypt) represent 52 % of the total Word number.
- The 16 countries with more than 1 million does (the same ones plus Indonesia, USA, Nigeria, Philippines, Germany, Belarus, Algeria, Thailand, Mexico) represent 75% of the total number of does.
- From a general point of view, the high number of does in some countries of the former Soviet Union (Ukraine, Russia, Belarus) and in some developing countries (China, Egypt, Indonesia, Nigeria, Philippines, Algeria, Thailand, Mexico) has to be emphasized.

The number of does per region presents much lower differences than the Rabbit Meat Production : 30 % for West Europe, 21 % for East Europe, 20 % for Far East Asia. In the same way, North Africa owns 9 % of the does but produces only 5 % of the Rabbit Meat. This is due to the higher productivity of the Western European does (36 kg of Rabbit Meat/year) compared to the other regions (27,5 kg for East Europe; 17,5 kg for Far East Asia; 14 kg for North Africa).

When expressed for 1000 inhabitants, the number of does shows the well-known importance of the Rabbit Production in Mediterranean Europe. By this criteria, the 2 first countries are 2 Mediterranean Islands (Malta, Cyprus) and Italy, Spain, France and Portugal are among the 9 first countries too. Globally, the number of does for 1000 inhabitants is close for West Europe (51), East Europe (40) and North Africa. It is much lower for the other regions (less than 10).

At the World level, the Rabbit Meat Production can be valued at 1 600 000 tons/year produced by 64 millions of does. This last data is lightly below our previous data (70 millions) due to a better estimation of the Does Productivity. At the Word level, the number of does is 12 for 1000 habitants.

2. Rabbit Production and national Economy

If a lot of the biggest producers are West European countries, the Rabbit Meat Production has the highest importance in the economy of some developing countries (Nigeria, Egypt, Ghana, Cape Verde Islands, Sri-Lanka, Morocco, São Tome et Principe) or of some East European countries (Ukraine, Slovakia, Belarus, Czech Republic). Malta is the only West European country among the 20 first countries for this criteria.

Globally, North Africa, East Europe and South Saharan Africa are the 3 regions where Rabbit Meat Production reaches or surpasses 1 p 1000 of the gross national product. Its economical importance is insignificant in North America and in Oceania.

At the World level, the Rabbit Production represents 0.25 p1000 of the total gross production

3. Consumption and Import Export of Rabbit Meat

Expressed by inhabitant, the Rabbit Meat Consumption confirms the high popularity of this meat in the Latin European countries and in their neighbors:

- Malta, Italy, Cyprus and Spain are the 4 biggest Rabbit Meat consumers.
- France, Belgium, Luxembourg and Portugal are among the 10 main rabbit meat consumers.

Rabbit meat consumption is high too in some East European countries (Ukraine, Belarus, Czech Republic, Slovakia) or in some African or American Islands with a Latin European influence (Martinique, Guadeloupe, Reunion, São Tome et Principe, Cape Verde Islands).

Globally, the 3 main regions for rabbit meat consumption are West Europe (2 kg/inhabitant/year), East Europe (1 kg/habitant/year), North Africa (0.5 kg/habitant/year).

The average World Rabbit Meat Consumption is 0.3 kg/inhabitant/year.

Rabbit meat exports keep on being dominated by 3 countries (China, Hungary, Belgium) even if the Hungarian Export has shrunk a lot from 2 years ago due to the bankruptcy of some slaughtering plants (COLIN *et al.*, 1996). Poland, France, the Netherlands, Denmark, Czech Republic and USA have significant exports too. Rabbit meat import keeps on being dominated by 5 countries (Italy, Belgium, France, United Kingdom, Germany) even if the Netherlands, Spain, Switzerland, USA, Canada and Japan have significant imports too.

Three countries are simultaneously big import countries and big export countries: Belgium, France and the Netherlands. Our new rabbit meat import-export amounts valuation is 91 000 tons/year about (5,6 % of the world meat production), Slightly lower than 3 years ago one (COLIN et LEBAS 1995), mainly due to shrink in Hungarian exports and Italian imports.

4. Structure of the production (table 3)

The traditional farms represent the main part of the Rabbit Meat Production in Central America (75 %), Middle East (70 %), North Africa (65 %), South Saharan Africa (58 %), East Europe (56 %) and Central Asia (48 %). At the World level, they produce 40 % of the rabbit meat.

Table 3 : Percentage of rabbit meat production and of rabbit does in the different world's big regions, in relation with the technical structure of the rabbitries

World Regions	Percentage of Production			Percentage of does		
	Tradition.	Intermed.	Commerc.	Tradition.	Intermed.	Commerc.
AFRICA North	58.04	31.84	10.12	66.97	26.57	6.46
AFRICA Middle & South	64.32	27.53	8.15	75.74	20.77	3.48
AMERICA North	6.58	83.68	9.74	8.15	88.29	3.56
AMERICA Central	74.45	15.86	9.70	86.53	8.93	4.54
AMERICA South	21.34	51.01	27.65	31.72	50.58	17.69
EUROPE East	56.22	21.67	22.11	72.39	15.30	12.31
EUROPE West	26.39	32.12	41.49	46.35	29.18	24.47
ASIA Middle East	70.33	16.00	13.67	82.43	11.12	6.45
ASIA Central	47.95	44.25	7.80	63.92	31.98	4.10
ASIA Far East	42.24	46.55	11.21	57.97	36.16	5.87
OCEANIA	18.18	23.38	58.44	41.71	28.91	29.37
WORLD average	40.17	32.91	26.92	58.26	28.89	12.85

The intermediary farms produce the biggest quantity of meat in North America where rabbit breeding is mainly a hobby, in Far East Asia due to the export orientation of the Chinese rabbit production and in South America where the rabbits produced are mainly consumed by ethnic minorities. At the World level, the intermediary farms produce 33 % of the rabbit meat.

The commercial rabbits farms produce the main part of the rabbit meat in West Europe where the rabbit production can be considered as a complete business and in Oceania where the legislation

Europe, this region has not a monopoly situation. Besides, expressed in relation to the national economy, Rabbit Production is relatively more important in many developing countries than in the European ones. The traditional farms still represent the main part of the Rabbit Meat Production (40%) with the highest number of does (58 %). Summarizing, this study confirms the importance of the traditional Rabbit Meat Production, particularly in some developing countries.

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Production de viande de lapin dans le Monde : une proposition pour chaque pays - Une étude de la production de viande de lapin a été effectuée par les auteurs pour 186 pays du Monde. Ils fournissent des valeurs pour chaque pays et pour les grandes régions du Monde : production de viande de lapin, importations et exportations, nombre de lapines et leur productivité, etc....En outre, de manière à éliminer l'effet de la taille des pays, certains paramètres ont été exprimés en fonction du nombre d'habitants ou du produit national brut des différents pays. Ces données ont été réparties également en fonction de 3 types d'élevage : traditionnel (moins de 8 lapines reproductrices/élevage), intermédiaire (de 8 à 100 lapines) et commercial (plus de 100 lapines). La production mondiale de viande de lapin est estimée par les auteurs à 1,6 millions de tonnes de carcasses. En valeur absolue, la production est concentrée dans un petit nombre de grand pays : Italie, France, Ukraine, Chine, Espagne, Russie. Par contre, elle représente une part importante de l'économie de petits pays (Malte) ou de pays en voie de développement (Nigeria, Égypte, Ghana, Îles du Cap Vert, Sri-Lanka, Maroc, São Tomé & Príncipe). La viande de lapin est consommée principalement dans les pays latins européens (1,9 à 5,6 kg /habitant & /an), et en deuxième lieu dans certains pays d'Europe de l'Est (1,04 kg/an en moyenne pour ce groupe de pays). En moyenne la consommation mondiale de viande de lapin est de 0,3 kg /habitant & /an. Le commerce international (5,6% de la production mondiale) est dominé par un très petit nombre de pays : Chine, Hongrie, Belgique, Italie, France, Royaume Uni, et Allemagne. Les lapines reproductrices des élevages traditionnels sont de loin les plus nombreuses (58,3% des 64 millions de lapines présentes dans le Monde) et elles produisent globalement 40% de la viande. Par contre, leur productivité est modeste: 17,3 kg de viande produits par an, contre 28,8 kg ou 54,3 kg pour les lapines des élevages intermédiaires ou commerciaux.
