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Near East Growth Potential of Poultry

By

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There is considerable evidence for increasing the number of eggs and poultry projects in the near east countries during the next 20 years. The average daily intake of animal protein in this region is around 12.2gm/ person, while it reached 47gm in developed countries. The recommended daily requirement determined by the Food and Agriculture Organization of the United Nations is 29gm. A relatively high population growth rate, increasing income due to the shooting up of oil prices associated with high-income elasticity for animal products are major factors behind the increasing demand for animal protein between now and the end of this century. The rise in demand is far greater than what can be met from possible expansion in cattle, sheep, goats and buffalo production. In addition, the traditional poultry industry cannot develop quickly enough to fulfil the increasing demand for animal protein. Therefore, the only way in which the supply of animal protein could be increased to match the demand is through an expansion in intensive commercial poultry production.

A development program for 18 Near East countries has been drawn up by H. F. El-Issawi and I. Soliman which aims at raising average annual per caput consumption from current 4.4kg of poultry-meat and 56 table-eggs to 12.8kg and 128 eggs by the year 2000. Three regional projects are proposed to support the overall development program, which, being responsible for supplying feed ingredients and mix, breeding stock and equipment' to their specific regions.

A joint Arab fund of \$3.5 million is required to finance the proposal over the period but it is pointed out that this represents less than 5% of the expected value of animal product, which will be imported into the 18 countries up to the year 2000. However, to make the proposed program effective, co-operation is required between the 18 countries to solve many problems, which will arise relating to trade, pricing and marketing policies of the commodities involved. Co-operation will also be required in the fields of training and veterinary services.

Only seven of the concerned 18 countries reached an annual average consumption of animal products are above the world averages. Such averages are about 20kg of red meat, 5.5kg of poultry, 100kg of milk 18kg fish and 118 table-eggs. However, these countries depend, largely on imported

animal products. They will continue to do so as long as the annual demand for these products is expected to grow at 6%, while the growth rate in production around 2-3% from 1977 to 2000. It is estimated that these 18 countries will spend about \$76 million on imports to meet the growing demand for animal products until the year 2000.

The major element in a development program for intensive poultry production is the availability of funds to finance construction, modern technology and required infrastructure, in particular, that needed for processing and marketing the end products. The eighteen countries were classified according to their capability to finance the proposed program:

1) Completely auto-financed: Bahrain, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates and Libya,

2) Partially auto-financed: Jordan, Lebanon, Oman, Syria, Egypt, Morocco and Tunisia. In these instances, only part of the necessary investment can come from these countries. The rest is provided from outside sources.

3) Completely outside financed here available funds from domestic sources are not capable to provide significant finance for poultry program. These countries are the Arab Republic of Yemen, Sudan and Somalia. The proposed poultry program would have to be totally financed from outside these countries.

The proposal envisaged the setting up of completely integrated broiler and egg Projects. Each broiler project would have a production capacity of about six million birds a year while each egg unit would produce 15 million eggs per year. Estimated investment costs for each broiler project built from 1980 to 1985 and 1985 to 2000 were \$5.6 million and \$8 million, respectively. The corresponding figures for each table-eggs enterprise were \$1.5 million and \$2.0 million for the same periods. Each project would include parent stock farms, a hatchery, production farms, a feed mill and processing plant in broiler project or egg-packing plant in layers project.

The estimated annual rate of return to investment would not be less than 21% from each project. The whole program would be supported by the aforementioned three regional plans. This proposed that:

(1) The regional project dealing with feed may be located in Lebanon, or Tunisia or Jordan. Such supporting regional project could cut feed costs by 15-20% at current values. The preliminary estimate for the capital requirement for this regional project is about \$200 million.

(2) It is also suggested that the regional projects for grandparent stock farms for broilers and layers may be located in Iraq and/or Syria and/or Egypt at investment costs of about \$190 million.

(3) The third regional project to manufacture (under license) poultry equipment would be sited either in Syria, Lebanon, Iraq, Tunisia or Egypt at a cost around \$135 million.

These three regional schemes could be established as joint ventures with international companies. Even though the proposed program for the 18 countries would cost an estimated \$8840 million up to the year 2000 (see tables 1 and 2) it represents only little more than 10% of the anticipated cost of imports of required to fill the gap between the cumulative home-produced animal products and demand for till the year 2000. Excluding the investment costs in the seven oil-producing countries, the total foreign Finance needed would be \$2975.5 million for the sum of each country projects and \$525.0 million for the three regional projects, reaching a total of \$3500.5 million. The financial institutional framework for joint Arab co-operation for implementing the proposed development program already exists. There are several Arab funds provide financial support to development plans. There are also the Arab company for livestock development in Damascus (Syria) and the Arab authority for agricultural investment and Development in Khartoum (Sudan). These bodies could work together towards creating a joint Arab Authority to adopt and implement the proposed regional poultry programs

Table 1. Objectives and Investments of Proposed Development Program for Broiler Production in Near East Countries

Country	Base year consumption Kgs.1976-1978	Projected per- capita consumption (Kgs)		Additional production required (000) tons		Propose self-sufficiency Rate (%) In 2000	Investment costs requirements (million dollars)						
		1985	2000	1985	2000		1977-1985		Total	1985-2000		Total	Grand Total 1977-2000
							Local Finance	Foreign finance		Local financ	Foreign Finance		
Bahrain	12.9	16.7	20.5	1.15	6.4	73.5	3.0	0.0	3.0	9.0	0.0	9.0	12.0
Iraq	4.2	11.0	16.9	110.0	286.5	99.0	144.0	0.0	144.0	432.0	0.0	432.0	576.0
Kuwait	19.7	24.9	33.5	11.8	88.5	110.7	16.0	0.0	16.0	135.0	0.0	135.0	151.0
Qatar	15.0	19.0	29.6	4.0	7.2	110.8	5.0	0.0	5.0	12.0	0.0	12.0	17.0
Saudi Arabia	17.2	24.7	33.2	178.9	413.5	108.0	240.0	0.0	240.0	621.0	0.0	621.0	861.0
U. A. Emirates	21.0	31.0	36.0	5.9	90.7	104.0	8.0	0.0	8.0	135.0	0.0	135.0	143.0
Libya	5.3	9.8	16.8	27.9	85.7	100.0	7.5	0.0	7.5	28.0	0.0	28.0	35.5
Jordan	12.3	14.6	17.2	15.3	45.0	100.0	3.0	8.0	16.0	96.0	36.0	72.0	88.0
Lebanon	4.6	12.8	18.0	16.3	50.8	100.0	12.0	12.0	24.0	36.0	36.0	72.0	96.0
Oman	7.7	9.7	13.5	5.0	16.3	100.5	4.0	4.0	8.0	13.5	13.5	27.0	35.0
Syria	3.0	4.8	13.1	22.4	174.0	98.6	16.0	16.0	32.0	13.5	130.5	261.5	293.0
Egypt	3.4	5.6	15.7	142.0	877.0	100.0	96.0	96.0	192.0	679.0	634.0	1314.0	1506.0
Morocco	3.1	4.9	9.3	58.9	241.8	100.0	40.0	40.0	80.0	180.0	180.0	360.0	440.0
Tunisia	3.7	5.3	9.5	15.3	83.3	100.0	12.0,	12.0	24.0	63.0	63.0	126.0	150.0
A. R. Yemen	2.9	8.7	14.2	10.,0	133.9	100.0	00	16.0	16.0	0.0	198.0	198.0	214.0
P. D. R. Yemen	0.7	1.3	12.1	1.4	31.8	100.0	0.0	2.0	2.0	0.0	45.0	45.0	47.0
Somalia	1.0	1.7	2.8	1.3	5.2	100.0	0.0	0.0	0.0	0.0	9.0	9.0	9.0
Sudan	0.8	1.0	1.8	8.3	36.9	100.0	0.0	10.0	10.0	0.0	54.0	54.0	64.0
Total	.4	7.2	12.8	636.85	2674.6	97.8	611.5	216.0	827.5	2510.0	1400.0	3910.0	4737.5

(...) values of less than one million dollars

Table 2 Objectives and Investments of proposed Development program for table Egg Production in near. East Countries

Country	Base year consumption (gram) 1976-1978	Projected per-capita consumption (Kgs)		Incremental increase in production (000) tons		Proposed self-sufficiency Rate (%) In 2000	Investment costs requirements (million dollars)						Grand total 1977 2000
		1985	2000	1985	2000		1977-1985			1985-2000			
							Local finance	Foreign Finance	Total	Local finance	Foreign Finance	Total	
Bahrain	160	208	245	20	82	76.6	2.0	0.0	2.0	10.0	0.0	10.0	12.0
Iraq	55	118	245	1363	322	98.6	136.5	0.0	136.5	576.0	0.0	576.0	712.5
Kuwait	222	250	302	107	703	97.6	10,5	0.0	10.5	94.0	0.0	94.0	104.5
Qatar	120	177	304	36	77	100.0	3.0	0.0	3.0	10.0	0,0	10.0	13.0
Saudi Arabia	66	150	234	1055	2793	104.5	105.0	0.0	105.0	372.0	0.0	372.0	477.0
United Arab Emirates	200	253	294	111	610	100.8	12,0	0.0	12.0	82.0	0.0	82.0	94.0
Libya	102	169	264	450	12E0	100.0	45.0	0.0	45.0	170.0	0.0	170.0	215.0
Jordan	110	176	290	263	1955	100.0	9.0	9,0	18.0	130.0	130.0	260.0	278.0
Lebanon	93	116	133	149	279	100.0	8.0	7.0	15.0	19.0	19.0	38.0	53.0
Oman	45	66	138	36	170	100.5	2.5	2.0	4.5	11.0	11.0	22.0	26.5
Syria	122	150	202	527	2144	103.6	27.5	25.0	52.5	143.0	143.0	286.0	338.5
Egypt	35	49	107	1075	5767	103.0	54.0	54.0	108.0	463.0	325.0	788.0	896.0
Morocco	26	42	79	515	2031	100.0	26.0	25.0	51.0	135.0	135.0	270.0	321.0
Tunisia	60	100	180	312	1076	100.0	16.0	15.5	31.5	72.0	72.0	144.0	175.5
A.R. Yemen	44	94	178	93	1592	98.5	0.0	9.0	9.0	0.0	212.0	212.0	221.0
P.D.R. Yemen	38	81	146	100	252	100.0	0.0	10.5	10.5	0.0	34.0	34.0	44.5
Somalia	24	29	40	14	87	100.0	0.0	2.0	2.0'	0.0	10.0	10.0	12.0
Sudan	25	29	40	188	679	100.0	0.0	19.5	19.5	0.0	90.0	90.0	109.5
Total	45	77	128	6419	2590	99.5	457.0	178.5	635.5	2287.0	1181.0	34680	4103.5

Table 3: Production Necessities Required For Proposed Development Program

Country	Total-Feed Requirements		Feed Requirements (GOO) tons				Protein concentrates and Feed additives		Parent stocks requirement			
			Feed Grains & Brans		Meals & Cakes				Broiler Parents		Laying hens parents	
Year	1980	2000	1985	2000	1985	2000	1985	2000	1985	2000	1985	2000
Bahrain	14.1	59.7	9	39	.4	15	1	6	...			14
Iraq	1118.7	3718.2	727	2417	280	930	112	372	2320	7359	218	769
Kuwait	140.3	765.5	91	498	35	191	14	77	348	1907	20	110
Qatar	39.0	94.7	25	62	10	24	4	5	91	217	6	16
Saudi Arabia	1384.6	4165.3	900	2707	346	1041	138	417	3587	10860	182	537
United Arab Emirates	81.0	690.2	53	449	20	173	8	69	126	1721	21	99
Libya	422.7	1196.7	275	778	106	299	42	120	768	2275	96	259
Jordan	336.6	1105.1	219	718	84	276	34	111	721	1513	63	312
Lebanon	348.3	672.1	226	437	87	168	35	67	831	1725	55	90
Oman	34.0	168.1	22	109	9	42	3	17	...	384		28
Syria	578.7	2021.8	376	1314	145	505	58	202	809	3869	161	434
Egypt	1343.6	7196	873	4677	336	1799	134	720	3640	19066	156	891
Morocco	655.8	2394	426	1556	164	599	66	239	1706	6960	85	344
Tunisia	320.2	887.1	208	577	\$0	222	32	89	519	1517	58	195
A.R. Yemen	85.0	1179.5	55	767	21	295	9	118	201	2556	14	216
P.D.R. Yemen	44.9	269.1	29	175	11	67	4	27	26	585	17	49
Somalia	11.6	45.6	8	30	3	11	1	5	23	92	2	9
Sudan	171.3	463.3	111	301	43	116	17	46	302	894	40	99
Total	7130.4	27092.0	4633	17611	1784	6772	712	2707	16018	62500	1194	4471

(.. .) Broiler and/or laying hen farms do not provide significant economical scales as incentives for establishment of parent stocks,

References

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