

Chick Meat Production, Structure of Organization, Social and Economical Dimension and Usefulness to the Public: The Case Study of in Goynuk in Bolu

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Abstract: Until beginning of the agreement chick meat productions in the country every passing year rising the expansion or production, (yearly basis 15%) and country catch the standardization of EU. In this case study you may find the area of Bolu-Goynuk chick production status, social and economical dimensions of organization and gathering especially contractual production would be concerned. Moreover, you will find problems and lately heard bird flu how influence the local people. This study gives importance by looking at pros and cons of organizational model for the contractual production. By looking that you may find information about agricultural are workers has a word on production and looking at the side of the framers point of view. These are the major results of the study, production of chick meat finds the possibility of job opportunity for looking at producer's point of view the whole income for producer 65.9% comes trough chick meat, 63% of producers mention that volunteer of the organizing cooperative works and 54% claims they will be a partner of existing cooperative and furthermore small managements mentioned that 94% of them there will be no other possibility to follow that's why they follow the contractual production.

Key words: Contractual production, chick meat production, goynuk, organization, cooperative, Turkey

INTRODUCTION

In Turkey base of modern hen production occurred at the period of republican revolution especially after the 1960's sector show rapid development. 1970's family managements, 1980's integration and contractual production, 1990's with the big investments standardizations reaching the world stipulation and product continuously increased especially big investments seen of chicken meat and organized big integrations. About 70-75% of production in Turkey made by integrated establishments and 15-20% of production made in semi-integrated establishment (Bulbul and Besparmak, 2001). Wing animal sector in Turkey generally placed at the area of Bolu, Sakarya, Eskisehir, Mersin, Ankara which is high amount of poultry animal production occurred and big market share.

In chicken industry Turkey has got 10000 broiler management and 2.5 million people takes place at the chicken industry and gain money from this job opportunity. Yearly basis revenue of the wing meat sector almost provide 2.5 billion \$ and the share of gross national product 1.7%, one of the biggest and strongest sector agricultural item (Anonymous, 2004a, b, 2005; Canoler, 2002). About 10000 broiler management presented in

Turkey and 35% (3500) of them located in Bolu. From 2000's the firm located in Goynuk increase the share of the whole market and in 2005 with the 8.9% market share firm becomes 4th all around Turkey. Whenever crisis makes tricks in our economical cycles stabilized production with the increasing amount. Meat production increased to the year of 2006 at the amount of 957000 tons. Last year's shows consumption of chicken meat increased in Turkey. Consumption of person in the year of 2001 was 9 tons, however in 2005, consumption increased to 14 tons. On the other hand consumption of chicken meat in Turkey, compared with EU consumption, still lower than EU countries, even lower than half of their consumed (Tuncer, 2001).

Every year increase the import of the chicken meat production till 2005. At the year 2005 increase of import become 27 tons. There is almost no export of chicken meat in 2004 export 20 tons. From the source of 2004 USA was first line with approximately 15 million tons production and China continuous with the production of 8.9 million productions, India is the 5th largest producer of broilers (Saran *et al.*, 2005) and Turkey was 14th with the production amount 943 tons. Most of the nourishment firm in USA prefers the model of contractual production because of stably and qualified need of raw

materials. In this country contractual agricultural production stated at 1950's to produce of chicken meat. This model started to use at pig production in 1970's. From the information in USA agricultural put on broiler production in 1990 comes 90%. Further more in European Union (EU) agriculture products that produce by contractual model measures differentiate upon the countries. Cow meat and chicken meat production 95% produce by agreement production and sales by this way (Anonymous, 2005).

Importance of chicken industry in Turkey and in the world industrial production, production manner and organizing between producers and consumers, problems in the sector, sector's benefits of socially and economically, Bolu-Goynuk district taking example of in this study. Especially Goynuk district would be a symbol of the production firms and all existent production either socially or economically gains of producers side judged. Besides study includes suggestions that opportunity about producers organizations.

MATERIALS AND METHODS

Main material is questionnaires that apply on Bolu province Goynuk district and all written information provided form only firm that located in Goynuk district also all interviews with the firm managers. In this study shows the chicken meat marketing and sales condition in Turkey and all around the world.

From the start with Bolu-Goynuk district this study, looking at production and consumption, problems which are exist while production cycle, types of production which means advantages and disadvantages of contractual production, possibility of organization that producers. Bolu-Goynuk district chicken producers in 2006 enrolments that taken from Agriculture district Department and enrolments by giving importance trough size of the firms and divided in 4 groups.

Each group accepted as a population and by using the method of simple chance event experimental population amount founded (Table 1). In these calculations formulation (Cochran, 1963):

$$N = (Z^* \sigma/d)^2 / [1 + 1/N (Z^* \sigma/d)^2]$$

Where:

- n = Experiment amount
- Z = Possibility of (α) in standard normal in this study 95% will be the trusted line and $\sigma = 0.5$ that's way Z taken from the table 1.96
- σ = Standard turn over in chicken meat production in coops
- d = Sample mistake taken arithmetical average at (c) 10%
- N = Amount of Chicken Meat Producer Management

Managements, all size of management groups that applying questionnaires chosen randomly. All questions are looking for the producers functions of technical, economical and sociological dimensions of managements, also questionnaire gives importance upon organization desire and advantages and opportunities of organized sector. Questions measured upon 2 different styles given as Measure 1:

- 1: Definitely effected, 2: Effected, 3: Not effected, 4: Definitely not effected
- 1: Definitely yes, 2: Yes, 3: No idea, 4: No, 5: Definitely no

All results that given from questionnaire first of all entered the SPSS statistical program and then all those results researcher apply some tests such as frequency, variation analysis and Chi tests. Reasons of the chicken meat production side of looking at producers and reasons of contractual productions which producer makes suitable organization in the sector and what kind of possible organizations much more beneficial and suitable apply tests of variation analysis between management groups.

Within the management groups agricultural producer organization workshops desire, become a partner desire, continues of production of chicken meat, cooperative knowledge level gives any relationship calculated by using Chi square test. Besides this from all other sources of data taken important to giving a decision and comment.

Table 1: Bolu-Goynuk population of sample parameters and questionnaire calculations in chicken meat companies parameters and managements size

Parameters	1. Group (<3.000)	2. Group (3.000-5.000)	3. Group (5.000-10.000)	4. Group (10.000>)	Total
Capacity of managements					
Management amount (N)	133	144	371	158	806
Management average	2.514	4.1560	7.271	14.974	7.228
Wighed (c)	-	-	-	-	-
Example mistake (day)	25140	41560	72710	1.49740	72288
Populasyon stan.Sap. (s)	38000	62500	1.55000	4.65300	1802
Stand.Nor.Dagilim (Z)	196	196	196	196	196
No. of experiment (n)	9	9	17	37	72

RESULTS AND DISCUSSION

Economical place of chicken meat production: Bolu (with share of 35%) and Goynuk district (with share of 8.9%) selected that's why an important role of chick meat production in the country. In the research results contractual production system, in Goynuk district integrated firm provide the all costs to producer and at the last of the production period firm bought all product and subtracted the all cost of provided services and transportation and items and rest given as a revenue to producers.

According to firm's tax information (Anonymous, 2006a-e, 2005) and gives another research result whether a farmer and his family member made production with the coop capacity of 20,000 their monthly income must be 3600 YTL. Last year's even if the crisis, majority of producers total income came from this sector. According to research findings, pointing at total income 65.9% comes from the production of chicken meat sector (Table 2). This important two findings are shows that the importance of production of chicken meat in Goynuk district people. All producers in Goyuk working with the area's integrated firm 94% (Table 3) has no alternatives to make production among their contracts and in production period all problems eradicated by the firms veterinarians (area employees). In chicken meat

production follow up contractual basis producer has no problems like processing the product, qualifying or marketing these processes only belong to integrated firm and in crisis periods producer never directly influencing from problems.

Producer organizations and effects of social life of producer: Findings from the research another surprising result are farmers gives opportunity to work with their families because of this there is less immigration (village to city) seen in Goynuk district. Proportion of knowledge of cooperatives 94.4% (Table 4) however, the organizational structure didn't known (70%), especially 50% of producers thinks that cooperatives are governmental establishment idea comes from the managements of Agricultural Credit and Agricultural Sales Cooperatives. Between all agricultural cooperatives in Turkey best one is Agricultural Development Cooperative, in terms of the management style and involving all activities with their partners and their fundamentals are benefit from the members (Ozdemir, 2005). Success of cooperatives comes from the rural areas organized economic structure and organization start with education. By democratic agricultural cooperatives results of new technologies and improvements of institutions bring increase of production and these should solve the marketing problem of

Table 2: Entrepreneurs' production subject and revenue share

What kind of Agricultural activities are you participate?	Proportion (%)
Only Chiken Meat Production	1.3
Including Chiken Meat Production I have another agricultural productions	73.7
I have other proffetion and only Chiken Meat Production	0.7
I have other proffetion and with Chiken Meat Production I have other agricultural productions.	24.3
Total	100.0
What is the income of chicken meat porduction among the total yearly income?	
Azami 10%	5.9
11-25%	4.8
26-50%	23.4
51%+	65.9
Total	100.0

Table 3: Producers' reasons of contractual production

Factors	1.Group (>3000)	2.Group (3000-5000)	3.Group (5001-10000)	4.Group (10000<)
Profit	22.2	11.1	0.0	2.7
No alternative	77.8	88.9	94.1	91.9
Marketing problems	0.0	0.0	5.9	5.4
No influence for bird flu	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Table 4: Existence of producer organizations and their knowledge from publicity

Knowledge of cooperative	Values	Explanation of cooperative	Values
Yes	94.4	Partners get together and manage an organization among their economical aim	29.9
No	5.6	Economical organization that established by government	10.6
		Established by partners and managed by government	37.2
		Partners that established and on management they have a word according to their capital	19.5
		No Idea	2.8
		Total	100.0

Table 5: Understandings of agricultural producer organizations

Name of the organization	1.Group (>3000)	2.Group (3000-5000)	3.Group (5001-10000)	4.Group (10000<)	Average
Associations and foundations of agriculture	22.2	22.2	5.9	2.7	13.3
Agricultural cooperatives	22.2	11.1	41.2	21.6	24.0
Producer groups	0.0	22.2	5.9	10.8	9.7
Chamber of producer	0.0	0.0	5.9	24.3	7.6
Contractual production	0.0	0.0	0.0	0.0	0.0
All of them	22.2	11.1	11.8	10.8	14.0

Table 6: Cooperatives according to producers point of view

Desire of organizing a cooperative	1.Group (>3000)	2.Group (3000-5000)	3.Group (5001-10000)	4.Group (10000<)	Average
Definitely Yes	0.0	11.1	17.7	21.6	12.6
Yes	44.5	55.6	52.9	48.7	50.4
No decision	22.2	11.1	0.0	10.8	11.0
No	33.3	22.2	29.4	13.5	24.6
Definitely No	0.0	0.0	0.0	5.4	1.4
Total	100.0	100.0	100.0	100.0	100.0

Table 7: Desire of becoming a member on existed cooperatives

Are you going to become a member of existed cooperatives?	1.Group (>3000)	2.Group (3000-5000)	3.Group (5001-10000)	4.Group (10000<)	Average
Definitely Yes	0.0	11.1	5.9	24.3	10.3
Yes	44.5	55.6	64.7	51.4	54.0
No Decision	22.2	11.1	0.0	5.4	9.7
No	33.3	22.2	29.4	16.2	25.3
Definitely No	0.0	0.0	0.0	2.7	0.7
Total	100.0	100.0	100.0	100.0	100.0

producers. Before organizing a cooperative there will be questions has to be answered Does area needs any cooperative, Is there any desire or enough financer in area (Anonymous, 2004b).

After the research that Ozdemir and Basaran made in Trakya location, there is a lot of agricultural development cooperative existed in the area and majority of them functioning at milk sector. If there is a cooperative in one village all portion of milk taken by cooperative which takes the researchers attention. Even producers are afraid of establishing new cooperative however they are envying the existing cooperatives in terms of the advantages of cooperatives. Besides there is disadvantages of organizing a cooperatives for example democratic managements makes slow decision making process.

Wide partnership basis, makes bad influences on cooperative works when needs and self interest are differentiates another problem would be becoming a partner or a member of cooperative is easy so that this may cause non stable structure and bad influence on growth of the cooperatives. Besides this among the governmental purchases some government personnel sees that cooperatives no revenue managements that's why no proposals on their purchases. Looking at disadvantages of cooperatives, it is obvious that benefits are more than disadvantages (Anonymous, 2002).

In chicken meat productions contractual production taken a model production style, because of this there is no work on organizing a cooperative in this sector. There is

no availability because of the infrastructure don't allow among producers to gathering under cooperatives. Whether producers act together then they have a word on their contracts and they can bargain with the firms.

Government has to help on cooperative studies and be in front at least relevant organizations can give some studies and lessons and educate the public. Besides European Cooperative (SCE) support all studies on cooperatives (Anonymous, 2003). About 24% of chicken meat producer understands that cooperatives are an organization for establishing for producers benefit (Table 5).

Another interesting result of the research would be 67% of producer express they are going to continue to produce whether there will be no contractual firm exists. Model production style determined contractual production and there is no study upon this subject. However, lately there is working on organizing some producer administrations. Integrated firms doesn't allow to producers gathering. Some firms established some organizations and become members and this advantage gives them priority to act on sector and this tradition still continues and don't allow producers to get together. About 63% of producers state that they want to attend or organize a cooperative and 11% states they are hesitate or no decision on the subject, 25% states they don't want to attend any cooperative works (Table 6). Chicken meat producers are declared attend cooperatives which are existed (54%) and some of them declares they don't want to attend any cooperatives (10%) (Table 7).

From the research results there is a strong relationship between producers work on establishing a cooperative and become a partner of a cooperative. Between two variables' correlation coefficient 0.96 and this coefficient statistically meaning level is 99%.

CONCLUSION

From all these results, it is concluded that producers of chicken meat production in Goynuk satisfied from the integrated firm and from the results appeared that they have no idea about cooperative comprehension. However they are state that, they are going to establish one or become a member or partner of existed organization and if there will be a one model shown, there is no anti reason to appear on cooperative in this rural area.

REFERENCES

- Anonymous, 2002. The Role of Cooperatives in Economical, Social and Cultural Life within the European Union. Vol. 9, Turkish National Cooperatives Union Publications, Ankara.
- Anonymous, 2003. On the Statute for a European cooperative (SCE) directives. Official Eur. Union J.,
- Anonymous, 2004a. Agricultural Cooperativess in Turkey and European Union Model. Istanbul Chamber of Commerce Publications, Istanbul.
- Anonymous, 2004b. Annual Report of Poultry Endustry-2003. BESD-BIR, Ankara.
- Anonymous, 2005. Annual Report of Poultry Endustry-2004. BESD-BIR, Ankara.
- Anonymous, 2006a. Annual Report of Poultry Endustry-2005. BESD-BIR, Ankara.
- Anonymous, 2006b. Bolu Poultry Sector Emergency Action Plan Acil. Bolu Provincial Directorate of Agriculture, Bolu-Turkey.
- Anonymous, 2006c. Company Data, Erpilic Integrated Poultry Production and Marketing. Goynuk Commercial Limited Company, Goynuk.
- Anonymous, 2006d. Contractual Producers Operating in Erpilic Poultry Farm. Goynuk District Directorate of Agriculture, Goynuk, Turkey.
- Anonymous, 2006e. Panel -Economical and Social Dimensions of Avian Influenza. TZOB, Ankara.
- Bulbul, M. and F. Besparmak, 2001. Productivity and Profitability Analysis of Bolu Broiler Farms Benefited from different Contract Farming Methods. Vol. 219. TZOB Publications, Turkey.
- Canoler, Y., 2002. Sector Activity Report. BESD-BIR Publications, Ankara.
- Cochran, W.G., 1963. Sampling Techniques. John Wiley and Sons, New York.
- Ozdemir, G., 2005. Cooperative-shareholder relations in agricultural cooperatives in Turkey. *J. Asian Econ.*, 16: 315-325.
- Saran, S., P.V.K. Sasidhar, K.V.H. Sastry and R. Sing, 2005. Indian poultry industry: Current scenario and Future Prospects: A review. *Indian J. Anim. Sci.*, 75: 992-998.
- Tuncer, F., 2001. A research on the factors that affect the fertility in an example of broiler integrated farm. M.A Thesis, Ankara University, Institute of Natural and Applied Sciences, Department of Zootechnics.