Determining the Position of the Animal Capital in Turkish Agricultural Capital Compound and its Analysis

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Abstract: In this study, the compound of the animal capital is given and the study aims to determine the position and the importance of the animal capital. For this aim, the data which were obtained from 71 the agricultural enterprises of Tokat-Turkey by the Neyman method, were evaluated and analyzed. In the research area, % 74.41 of the cattle presence is composed by the local cattle race and % 20.54 has culture and culture hybrid cattle presence, and there is the presence of water buffalo at a rate of % 5.05. The value of animal capital on the average of enterprises is 13.303,73 and it makes % 7,97 of the active capital and % 32,70 of the working capital. According to the enterprise width groups, the proportion of animal capital in the active capital changes between % 6,58 and % 8,30. And this proportion with % 24,91 makes % 35,34 in the working capital. In the working capital, the animal capital increases according to the enterprise groups. The value of the animal capital per enterprise decare decreases according to the enterprise width groups. The enterprises have a value of 163,26 YTL on average. It changes from 149 YTL to 176,05 YTL according to enterprise width groups. The small share of the animal capital in the total outcome in the examined enterprises can be accepted as an indication that the importance given to the stockbreeding in Turkish agricultural enterprises have been decreasing. In order for stockbreeding to reach the desired level, the stockbreeding policies in use should be reviewed and stockbreeding should be moved to its place-to-be.

Keywords: Animal Capital, Stockbreeding, Turkey, Agricultural Enterprises

INTRODUCTION

In Turkey, in % 67.42 of agricultural enterprises, there are both vegetation and animal raising, and in % 30.22 it is only the vegetation raising, and in % 2.36 there is only the animal raising. The % 68 of the total number of enterprise where animal raising is conducted has less than 10 heads of cattle. Unfortunately, this structure can not express the size of the economic growth, and also it reduces the capability of raisers to bargain against the buyers, because the costs of the products are high. In developed countries, the share of the stockbreeding in total agricultural income reaches up to % 60s. But, the fact that the share of the stock breeding is around % 30 proves that most of the enterprises perform raising in order to meet their own needs. This situation points to that stockbreeding in Turkey is quite behind in terms of production and productivity and also in terms of usage of technology. The numbers of the enterprises that work according to the western type productivity is lower and the traditional family-run type business is common. The % 79 of the stockbreeding enterprises do it to meet their own needs, and % 18 of them cover semi-intensive, breeder-nomadic enterprises and % 3 cover intensive enterprises. One of the essential principles of the economic development is to improve the production. In order to improve the production, there is the need for purpose-specific investments and sufficient knowledge to implement technologic and biologic innovations. The realization of these aims depends on the existing amount of capital and the possibilities of capital provision. The capital is defined as “the stock of the goods and services that are directly and indirectly used, without direct manipulation for consumption, in order to improve the future production amount”. In Turkey, there is sufficient level of natural resources and enough manpower that can evaluate these natural resources, however, the existing capital in many agricultural enterprises particularly in the stockbreeding enterprises is not enough. This insufficient capital hinders
sufficient usage of inputs, the modernization of enterprises and the inherently possible increase in the income level of farmers in stock breeding enterprises. In order to conduct the economic activity regularly, consistently and effectively in stockbreeding enterprises, there is the need for renewal of the elements of the working and investment capital, to be needed by the enterprises, and the need for completion of them, if missing. Depending on the size and the capacity of the production, the enterprises can apply to the equity capital and to the foreign capital all through their activity. Increasing the income of the raisers, the enlargement of the enterprises, going for new investments and embracing new techniques, equity capita which is insufficient should be supported by the additional capital that will be provided from outside of the enterprise. In this study, the compound of the animal capital is given and the position and the importance of the animal capital is tried to be determined. Also, the place of the amount of the sales of animal products within gross outcome of the enterprise is determined and the importance given to the stockbreeding is shown with this respect.

**MATERIAL AND METHODS**

In the study, agricultural enterprises in Turhal District of the Province of Tokat were selected as the research area. Stratified sampling was used in order to increase the accuracy of the findings to be obtained through the information collected from the enterprises and to ensure sufficient representation of different parts in the primary mass. Of 14 neighborhoods and villages which were selected as the research area, the sample size was determined by means of stratified sampling by taking the enterprise breadths into account. In the study, there is % 99 confidence interval and % 10 deviation for determining the size of the sample. Of 14 neighborhoods and villages which were selected as the investigation area, the size of the sample was calculated as 71 by Neyman Method and the sample enterprises were randomly determined. The survey application and the horizontal cross sectional data were taken as the base and the surveying was implemented in February and May of 2006.

- Classification of the capital according to its functions was taken as the base in displaying the amount and the compounds of the capital of the enterprises.

In the study, determination of the income elements that make the gross outcome was conducted in the following way:

- Herbal and animal products which were sold were evaluated by their sale prices, and the products that are consumed in the family and are given to the workers are evaluated by their price of farm yard. For the sale prices, the remarks of the manager were predicated on.
- In inventory value changes, the increase in the value were included in the gross outcome, on the other hand, the decreases in the values were displayed in the enterprises expenses.
- In inventory value changes, they were calculated by considering the values in the New Year and the ones at the end of year.
- Also, in inventory value changes, the effect of the changes in the conjuncture was taken account of.
- The inventory value change in animal presence was calculated by means of the following formula:

  \[ \text{Inventory Value Change} = (\text{year-end presence} + \text{sold}) - (\text{New Year presence} + \text{purchased}) \]

- For determination of service income, the remarks of the manager were predicated on.
- For determination of residential rental value, % 3 of the value of the building was predicated on.

**RESULTS AND DISCUSSIONS**

The number of the cattle that were raised in the District of Turhal of the Province of Tokat in the year of 2005 is 34,662. The 25,793 ( % 74,41) of the presence of cattle is composed of local cattle race. It has 7119 ( % 20,54) culture and culture half-bred cattle race. There are 1750 ( % 5,05) water buffalos. The number of small cattle is 21171. Sheep makes the biggest part with 16211 heads. As for the presence of the winged animal, chicken potential makes % 91, 67 of the total potential, which is 96000. There are 497 numbers of bee hives in the district.

When the amounts of animal production in the research areas in the year of 2005 were examined, we see that the meat production was 297,388 tonnes, the total leather production (cattle and small cattle) was 35,041, the egg production was 4,400,000, the milk production was 2500 tonnes and honey production was 24.1 tonnes.

Working capital is the capital group that makes the farming capital productive and usable. This capital group is composed of the fixed working capital (animal capital and tools-equipment capital) and the circulating capital (equipment-provision capital and money capital). Almost all of the value of the animal capital is composed of cattle and small cattle values. The presence of the poultry of the enterprises was
included in the animal capital. There is no element that is encountered as working animal in the enterprises.

In table 1, the rates of the animal capital within the active capital and the working capital, as well as its value for the working land, were given.

The value of the animal capital, which is 13,303,73 YTL on the average of the enterprises, makes % 7,97 of the active capital and % 32,70 of the working capital. The rate of the animal capital in the active capital changes between % 6,58 and % 8,30. This rate of % 24,91 makes % 35,34 within the working capital. In the working capital, animal capital increases compared to the working groups. The value of animal capital per working land decare decreases compared to the enterprise width groups. The enterprises have a value of 163,26 YTL on average. It changes depending on the enterprise width groups from 149,00 YTL to 176,05 YTL.

In the enterprises that are examined, the elements of the gross outcome are given in Table 2. The gross outcome in the enterprises keeps increasing unconditionally with the enterprise width as can be seen in the table. Being one of the reasons that make the gross outcome, the amount of the sold herbal products, the amount of the sold animal products, the value of the farm products which are consumed by the family, service incomes and the inventory value increase grow with the enterprise width, however, residential rental amount changes upon enterprise width. Of the whole outcome in average of all enterprises, % 75,12 is sold products, % 8,70 is the inventory value increases and % 7,35 is the sold animal products.

**Conclusion:** In the enterprises which were examined, the animal capital and its size in the total outcome can be accepted as an indication of the importance given to the stockbreeding in Turkish agricultural enterprises. Amongst the main reasons for that, we can list the following: non-economical enterprise sizes, insufficient use of knowledge and technology in use of high quality rough and dense fodder, not using documented stud, disorganization, the registry system’s not becoming widespread, the troubles in the general economy and agricultural policies. The need, in sector, for the quality of rough fodder is known to be around 50 million tonnes, but only 18-20 million tonnes of this could be provided. It is also known that Turkey is almost wholly dependent on other countries in terms of dense food. If the prices go up in the stockbreeding sector, it will not possible to increase the animal presence immediately. Likewise, it will not be possible to slow down the production if the prices go down. Market conditions and economic instability might cause giving up stockbreeding activities in the sector or removal of animals by slaughtering. And when the

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**Table 1:** The share of the animal capital within the active capital and the working capital as well as its value per working land decare according to the breadth of the enterprises. (YTL, %)

<table>
<thead>
<tr>
<th>Enterprise breadth groups (da)</th>
<th>Number of enterprises</th>
<th>Animal capital</th>
<th>Working capital</th>
<th>Active capital</th>
<th>Its share in the working capital (%)</th>
<th>Its share in the active capital (%)</th>
<th>Its value per working land decare (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 50</td>
<td>23</td>
<td>6 446,74</td>
<td>25 881,83</td>
<td>98 002,50</td>
<td>24,91</td>
<td>6,58</td>
<td>173,32</td>
</tr>
<tr>
<td>51 – 100</td>
<td>31</td>
<td>12 956,61</td>
<td>37 959,87</td>
<td>156 200,05</td>
<td>34,13</td>
<td>8,30</td>
<td>176,05</td>
</tr>
<tr>
<td>101 – +</td>
<td>17</td>
<td>23 213,82</td>
<td>65 693,72</td>
<td>279 821,82</td>
<td>35,34</td>
<td>8,30</td>
<td>149,00</td>
</tr>
<tr>
<td>Average of enterprises</td>
<td>71</td>
<td>13 303,73</td>
<td>40 687,76</td>
<td>166 946,90</td>
<td>32,70</td>
<td>7,97</td>
<td>163,26</td>
</tr>
</tbody>
</table>

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**Table 2:** Gross outcome elements and their rational distribution in the enterprises, which were examined. (YTL, %)

<table>
<thead>
<tr>
<th>ENTERPRISE WIDTH GROUPS (da)</th>
<th>1 – 50 (23)</th>
<th>51 – 100 (31)</th>
<th>101 – + (17)</th>
<th>GENERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of sales in herbal products</td>
<td>10 266,80</td>
<td>17 521,32</td>
<td>30 374,94</td>
<td>18 248,89</td>
</tr>
<tr>
<td>Amount of sales in animal products</td>
<td>953,87</td>
<td>1 501,27</td>
<td>3 431,32</td>
<td>1 786,07</td>
</tr>
<tr>
<td>Farm products consumed by the family</td>
<td>801,80</td>
<td>848,86</td>
<td>1 183,82</td>
<td>913,56</td>
</tr>
<tr>
<td>Farm products given to the workers</td>
<td>11,74</td>
<td>124,69</td>
<td>213,71</td>
<td>109,42</td>
</tr>
<tr>
<td>Service income</td>
<td>300,65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential rental value</td>
<td>405,26</td>
<td>440,45</td>
<td>437,82</td>
<td>428,42</td>
</tr>
<tr>
<td>Inventory value increase</td>
<td>1 043,26</td>
<td>2 184,84</td>
<td>3 433,38</td>
<td>2 113,98</td>
</tr>
<tr>
<td>GROSS OUTCOME</td>
<td>13 782,58</td>
<td>23 138,00</td>
<td>40 624,99</td>
<td>24 294,40</td>
</tr>
</tbody>
</table>
conditions improve, it is not possible to put new animals instead of the previous ones and it becomes inevitable to be increasingly dependent on the abroad.

REFERENCES