

## ECONOMIC IMPACT OF THE HPAI H5N1 OUTBREAKS AMONG TURKEY PRODUCERS, 2005–06, TURKEY

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### Important Findings

The research assessed the direct economic impacts of the 2005–2006 high pathogenicity avian influenza (HPAI) outbreaks upon contracted turkey producers in Turkey in 2007. Changes in production and economics parameters before and after the HPAI H5N1 outbreak periods were compared. The research revealed that changes in the technical parameters (number of hired labor, feed conversion ratio (FCR), mortality rate and the length of fattening period) were not found to be statistically significant. However, there were severe impacts of the HPAI H5N1 outbreaks on the economic parameters of the turkey production as follows:

- The contracted turkey producers lost on average 38% of production, and their management fees were reduced by 9.3% in the eight months after the outbreaks.
- As a result, the production level and enterprise income declined by 36% and 39% respectively.
- 93% of the producers did not do any other supplementary work during the idle production period.
- 59% of the producers had to use on average US\$3200 from their personal savings during the HPAI H5N1 outbreaks.
- 62% of the producers stated that they had considered expanding their business, but suspended this idea due to the outbreak.
- 80% of the producers increased the bio-security measures after the outbreaks.

### Significance of Findings

The annual national turkey production in Turkey has increased from 2.6 tonnes/year in 1995 to 53.6 tonnes in 2005. However, the sector is very sensitive to the general condition of the national economy. The annual growth rate was between 22 per cent and 258 per cent in good years of the economy. It was however, –37% in the 2001 Economic Crisis in Turkey. The above statistic and the findings in this study depict how vulnerable the turkey producers are to the

crisis in the markets. Considering this, it is important that the government have proper rehabilitation programs for the contracted turkey producers, not only to better protect the contracted turkey producers from the impacts of HPAI outbreaks but also to encourage them to improve their participation to its HPAI control programmes.

### Additional Information

In Turkey, the first declared outbreak of HPAI H5N1 was October 7, 2005 in a small-scale sector farm with contacts of domestic animals with migratory birds being the likely reason for the outbreak. This first outbreak was successfully controlled without spread to other areas.

The second outbreak started on December 25, 2005 in eastern Turkey and resulted in human deaths and spread to 53 out of 81 provinces of Turkey during the peak season of migratory birds. Due to the human deaths from the HPAI H5N1 disease, the second wave caused severe panic among consumers with an impact that lingered through mid-February 2006. As a result, the poultry meat market collapsed with sales dropping to 1–4% below pre-disease levels, and prices dropping to a level much lower than the cost of production in the early days of January 2006.

The last outbreak of the second wave was recorded in March 31, 2006. Until this date there were 230 confirmed cases (30 in wild birds, 199 in backyard producers, and 1 in a sector-3 commercial farm); 6,510 birds died from the disease; 2.5 million backyard poultry were culled. Additionally a program to control production of table eggs and avoid sales of spent hens in the rural markets was instituted where 13.5 million layer hens older than 60 weeks of age were culled.

Although the HPAI H5N1 outbreak was expected in Turkey and various preventive drills have been carried out, the rehabilitation step of this control program was omitted. No assessment was made with respect to the economic and socio-economic impact that may be caused on the sector participants. In order to provide information to better support producers in establishing rehabilitation program for potential epidemic disease outbreaks in Turkey, this research was carried out to estimate the economic and socio-economic impacts of 2005–06 HPAI H5N1 outbreaks on different segments of the poultry industry, namely, industrial broiler and turkey meat producers (integrated firms and contracted producers), egg producers, backyard poultry producers, and consumers.

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## IMPACTO ECONOMICO DE LOS BROTES DE HPAI H5N1 ENTRE LOS PRODUCTORES DE PAVO, 2005–06, TURQUIA

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### Hallazgos Importantes

La investigación analizó los impactos económicos directos de los brotes de influenza aviar de alta patogenicidad (HPAI, por sus siglas en inglés) en 2005–2006 para los productores de pavo en aparcería (contratados) en Turquía en el 2007. Se compararon los cambios en

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