

EFFICACY OF DIFFERENT METHODS TO CONTROL WILD BOARS: A PERCEPTION OF FARMERS OF THE FAISLABAD DIVISION

Mazher Abbas*, Shahid Hafeez Khan**, Rashid Ahmad Khan** and Maqbool Shahbaz*

*Pakistan Agricultural Research Council, Islamabad.

**University of Agriculture, Faisalabad.

The study was carried out to judge efficacy of wild boar's control methods as perceived by the farmers. A 140 sugarcane growers were the study respondents. Overwhelming majority of respondents (85.80%) considered chemical control as highly effective. Only 14.20 % respondents found chemical control as moderately effective. However, slight effectivity of various non- chemical control methods as visualized among different respondents was 52% for shooting, 84% for snaring, 84 % for trapping, 56% for electric fencing and 80% for frightening devices.

Key words: Habitat, wild boar, control

INTRODUCTION

Wild boar, (*Sus scrofa*) is distributed in North Africa, Europe and Asia (Heptner et al. 1966). Thus, Pakistan is part of its ancestral range. Wild boars are found in the upland areas (1000 m elevation) of Pakistan and plains of Punjab, North West Frontier Province and in Sindh around the Indus river (Roberts, 1977).

The development of the irrigation canal system in Pakistan has increased the habitat for wild boars. Originally, they were restricted to riverain habitats, which provided them dense cover, abundant water and seclusion. Once agriculture spread beyond the riverain zones in the Punjab and Sindh due to canal network, a variety of suitable habitats for wild boars appeared in isolated patches all over the Indus plain (Beg and Khan, 1982). These new habitats brought wild boars into contact with croplands where they now obtain much of their food.

Roberts (1977) reported that wild boars damaged sugarcane, potato, wheat and rice. Khan (1982) analyzed the stomach contents of 48 wild boars killed in croplands around Faisalabad district and found that wheat and molasses scum were the most preferred food items followed by cyperus spp. tubers, maize, sorghum, cotton, mesquite pods, leaves, sugarcane, and rice. Shafi and Khokhar (1986) surveyed the sugarcane fields in Sargodha and Sheikhpura districts and found 35.4 % damage to all stalks of Triton (sugarcane), a soft-rind, high sugar-content variety, while damage to the hard-rind varieties ranged from 6.7 to 8.3 %. Thesigar (1964) and Prater (1965) have studied the biology of the wild boars and had tried different methods like swine fever, gun shooting, explosive bombs, electric fence and chemicals from time to time for the control of this wild menace with varying success.

Wild boar is perhaps the second most important vertebrate pest, next to rats and mice in Pakistan. Due

to general lack of basic knowledge about wild boar control measures, there is a need to develop control methods and strategies to prevent crop damage by this pest to increase crop yield.

MATERIALS AND METHODS

A farm level survey was conducted in Chiniot, District Jhang in Faisalabad division. Tehsil Chiniot comprises of 28 union councils, of which 14 union councils were selected randomly for the study. Chiniot area is the most progressive agriculturally and representative area of sugarcane cultivation. Cane growers are the ideal respondents to inquire about the extent of effectiveness of the wild boar's control methods. The study area is also an ideal wild boar's habitat i.e. river belt, marshy area, cropped area. From each selected union council, 10 cane growers were selected at random. Thus, total number of respondents was 140. The data were collected through farmers' interviews using a well- structured questionnaire. The data, thus obtained were analyzed using simple percentages to estimate the various responses and draw conclusions for pertinent recommendations.

RESULTS AND DISCUSSION

Overwhelming majority (85.80%) of the respondents considered chemical control method as highly effective. Only 14.20 % respondents found it moderately effective. However, slight effectivity of various non- chemical control methods as visualized among different respondents was 52% for shooting, 84% for snaring, 84 % for trapping, 56% for electric fencing and 80% for frightening devices. It was observed that the results of wild boar control methods usually differed in different locations. One control method may be more effective in one area and the same may be less effective in other area. The results

Table 1. Effectiveness of Wild Boar's Control Methods (Farmers' response)

Effectiveness				
Control methods	Highly effective (Percent)	Moderately effective (Percent)	Slightly effective (Percent)	In-effective (Percent)
Chemical Control Method	85.80	14.20	-	-
Non-Chemical Control Methods				
Shooting	-	42.14	52.14	5.71
Snaring	-	0.71	83.57	15.71
Trapping	-	0.65	83.57	15.80
Electric Fencing	-	10.00	55.71	34.28
Frightening Devices	-	1.42	80.00	18.57

were consisted with Khan, et. al. (1980) who reported that chemical control method is cheap, effective and farmer friendly. These results were also in line with those of Birmingham (1983) who found that trapping as a removal technique showed only limited success and less cost effective. Snares were not commonly used, however, it would have been effective control method if used by large majority of farmers. The results were also consistent with those of Vassant and Boisabert (1984) who found that acoustic devices had been used in France in an attempt to prevent wild boar damage to field crops but with little success.

CONCLUSIONS AND RECOMMENDATIONS

- A chemical control method is the most effective for wild boar control.
- Wild boar should be controlled through poison baiting (chemical).
- Non-chemical control methods of wild boar i.e. shooting, snaring, trapping, electric fencing and frightening devices were slightly effective.
- Snares can also be effective if used in large numbers.

REFERENCES

- Beg, M.A. and A.A. Khan. 1982. The wild boar in Pakistan. I. Distribution, habitat and movement patterns. *J. Anim. Sci. Pak.* 4(1-2): 46-51.
- Birmingham, G.H. 1983. Foral Hogs. In: "Prevention and Control of Wildlife Damage", R.M. Timm (Ed.).
- Heptner, V.G., A.A. Nasimovic and A.G. Bannikov. 1966. *Die Saugetiere der Sowjetunion. Band I: Parrhufer und Unparhufer.* VEB Gustav Fischer Verlag, Jena, DDR. 939.
- Khan, M.H., R.A. Khan and M.A. Qayyam. 1980. Chemical Control of Wild Boars. *Pak. Ext.*, 2(1-2): 45-50
- Khan, R.A. 1982. Biology and population census of wild boar in district Faisalabad, Pakistan. M.Sc. Thesis, Dept. of Agri. Entomology, Univ. of Agri. Faisalabad.
- Prater, S.H. 1965. *The Book of Indian Animals*, (2nd ed.), National History Society, Bombay.
- Robrts, T. J. 1977. *The Mammals of Pakistan.* Earnest Benn London.
- Shafi, M.H. and A.R. Khokhar. 1986. Some observations on wild boar (*Sus scrofa*) and its control in sugarcane area of the Punjab, Pakistan. *J. Bombay Nat. Hist. Soc.*, 83 : 63-67.
- Thesiger, A.W. 1964, *The Marsh Arabs.* Longmans Green, London.
- Vassant, J. and B. Boisabert. 1984. Evaluation of "Movement of Experiments Made in Haut- Marne to Reduce Wild Boar Damage", *Symp. Intt. Sar le Sanglier, Toulouse (France)*, 187-199.