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## Local leaders' knowledge of climate change phenomena and their response Its harmful effects on the agricultural sector in Kafr El-Sheikh Governorate

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## **Abstract**

This research mainly aimed to identify the local leader respondents' knowledge of the climate change phenomenon and confronting its harmful effects on the agricultural sector, through identifying their knowledge level of the manifestations indicative of climate change, as well as their knowledge level of the harmful effects of this phenomenon, and identifying their most important suggestions to confront these effects. The research was conducted on a simple random sample of 156 respondents, who were selected from three villages in Kafr El–Sheikh Governorate: Arimoun, Manshiyat Abbas, and Al–Ajouzin in the districts of Kafr El–Sheikh, Sidi Salem, and Desouk, respectively. The data were collected by a personal interview questionnaire at the November 2023 to February 2024 . Frequencies, percentages, arithmetic mean, and standard deviation were used to analyze the data and present the results.

## The most important results were as follows:

- 11.5% of the total leader respondents had a low knowledge level concerning the manifestations indicative of climate change in the agricultural sector, and 27.6% of them had an average knowledge level.
- 19.9% of the total local leader respondents had a low knowledge level of the harmful effects of climate change, and nearly 30% of them had an average knowledge.
- The most important suggestions of the local leader respondents to confront the harmful effects of climate change were: to treat agricultural waste, recycle it, benefit from it, and not burn it (87.8%), not to discharge factory waste into irrigation water (74.4%), and to breed and cultivate varieties that are resistant to heat, drought, and salinity (64.4%).

Keywords: Local leaders, climate change phenomena, response Its harmful effects