Abdoul Azizou OUMAROU DAN-BAKI

UFR/SEG of Ouaga 2 University of Burkina Faso

BURKINA FASO

Email: abdoulazizoumarou62@yahoo.fr ,

Phone: (+227) 98249428 / 93126631,

(Corresponding author)

Mamane TARNO

Faculty of Economic Sciences and Management

Abdou Moumouni University of Niamey

NIGER

Email: tarnomamane@yahoo.fr

**Abstract**

This article studies the economic profitability of the millet production in a context of adaptation to climatic changes by considering the techniques of adaptation to soil protection, namely, low wall girdles tree and half-moon in order to determine their impact on the economic profitability of the production of this cereal.

The economic model of profitability developed by Gnanglé and *al.* [15] is used to analyze this effect. The data used in this paper is obtained from the ministry of agriculture of Niger (ECVM/A 2015) and consists of 3,985 households from two regions of Niger, namely, the Maradi and Diffa regions. The results show that the techniques of "belt of tree" and "half-moon" increase the economic profitability of the millet production and that the effects are, respectively, 0.19 and 0.054 in the two areas. The econometric results show that these techniques are profitable in both areas. Given the effectiveness of these techniques, this study suggests that producers increase these practices in order to mitigate the effects of climate change on the millet production in Niger. Lastly, the government must popularize these techniques and support their use for a better adaptation of agriculture in these zones to climate change.

**Acknowledgement:**

We express our sincere gratitude to Dr. Hassan Abdo and Dr. Mamoudou Hassane for their constructive and invaluable comments. We are also indebted to Professor Youssoufou Hamadou Daouda for his guidance throughout this research.