

POLICY BRIEF PB/07/25

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Does Bank credit mitigate nature and climate change effects in cereal production in Kenya

Key Messages

- Bank credit enables cereal farmers to purchase farm inputs and undertake farm operations that counteract the adverse impacts of nature and climate change on the growth and development of cereals in Kenya. Cereal farmers are also using bank credit to finance the adoption of farming practices and technologies that enhance the resilience of cereal of nature and climate change, which increases yields.
- However, access to credit also enables farmers to undertake intensive cultivation, even in ecologically fragile areas, which accentuate environmental degradation and biodiversity loss and decline in soil fertility. In addition, drought and excess rains embeds cereal production, especially wheat maize and rice, thereby increasing food insecurity and poverty.
- 3. Priority areas to the enhance resilience in cereal production are:
 - Enhancing access and utilization of bank credit by small scale cereal farmers
 - Increasing awareness of the availability of environmentally sustainable funding to farmers from the bank sector and the specialized financial institutions.
 - Educating cereal farmers on how to undertake farm operations in manner that enhances resilience of crops farm operation to climate and nature changes through adaptation and mitigation.
 - Developing green taxonomy for the banking sector to inform lending to cereal farmers.

1. Persistent decline in cereal in tandem with adverse nature and climate change in Kenya, despite increased access to bank credit

Cereals contribute 7 percent of GDP and 70-80 percent of agricultural output in Kenya. Cereals and cereal product also constitute 70-80 percent of the daily food intake, while 555-60 percent of animal feeds are made from cereals. Maize grows in the high and lowlands, wheat, barley, sorghum and millet grow in medium to high altitude areas with lower rains, while rice grows in marsh and wetlands, which are ecologically fragile. Most of the cereal farmers are small scale, while large scale farmers grow wheat maize, barley and rice.

Authored By: Peter Wamalwa, Anne Kamau, Maureen Odongo and Roseline Misati

Cereal production per capita declined from 167 kgs to 66 per capital between 1963 and 2022, with significant decline being recorded between 1990 and 2020, during which Kenya experienced increase in temperature and variability of rainfall. In addition, the demand for food resulted to increase in the acreage under cereal cultivation, even in ecologically fragile areas. The gains in financial inclusion have increased access to credit by farmers. However, access to credit is mainly concentrated to large scale farmers.

2. Impact on cereal production, nature and climate change

Despite increase in the area under cereal cultivation, cereal production and income derived from cereals has been declining, mainly attributed to adverse changes in weather, decline in soil fertility, loss of biodiversity, inadequate funding to enable purchase of farm input and equipment to increase productivity.

Difficulties in access to credit has also embedded farmers from switching to climate and nature resilience varieties of cereal and methods of farming and to adapt to nature and

3. Policy interventions

Therefore, policy makers in Kenya to enhance access and utilization of bank credit by small scale cereal farmers, whore susceptible to climate change and contribute significantly to biodiversity loss and environmental degradation. Increasing awareness of the availability of environmentally sustainable funding to farmers from the banking sector and the specialized financial institutions will increase the uptake of the credit facility. This will enable farmers bridge the financing gap to adapt to climate change and practice

climate or mitigate the adverse impact of climate change on cereal production chain.

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Extensive cultivation cereal to meet increase in has led to environmental degradation biodiversity loss and encroachment in ecologically fragile areas.

sustainable methods of cereal cultivation. Educating cereal farmers on how to undertake farm operations in manner that enhances resilience of crops farm operation to climate and nature changes through adaptation and mitigation. Developing green taxonomy for the banking sector to inform lending to cereal farmers is also critical.

References

- 1. Chandio, A. A., Ozturk, I., Akram, W., Ahmad, F., & Mirani, A.A. (2020). Empirical analysis of climate change factors affecting cereal yield: evidence from Turkey. Environmental Science and Pollution Research, 27, 11944-11957
- 2. Chandio, A. A., Jiang, Y., Rauf, A., Ahmad, F., Amin, W., & Shehzad, K. (2020). Assessment of formal credit and climate change impact on agricultural production in Pakistan: A time series ARDL modeling approach. Sustainability, 12(13), 5241.
- 3. Zakaria, M., Jun, W., & Khan, M. F. (2019). Impact of financial development on agricultural productivity in South Asia. Agricultural Economics, 65(5), 232-239.

Kenya Bankers Association

13th Floor, International House, Mama Ngina Street P.O. Box 73100– 00200 NAIROBI Telephone: 254 20 2221704/2217757/2224014/5 Cell: 0733 812770/0711 562910 Fax: 254 20 2221792 Email: research@kba.co.ke Website: www.kba.co.ke

