

From knowledge to action: Quantifying the knowledge–action gap in smallholder extension systems. A case study of smallholder macadamia farmers in Ntchisi District, Malawi.

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INTRODUCTION.

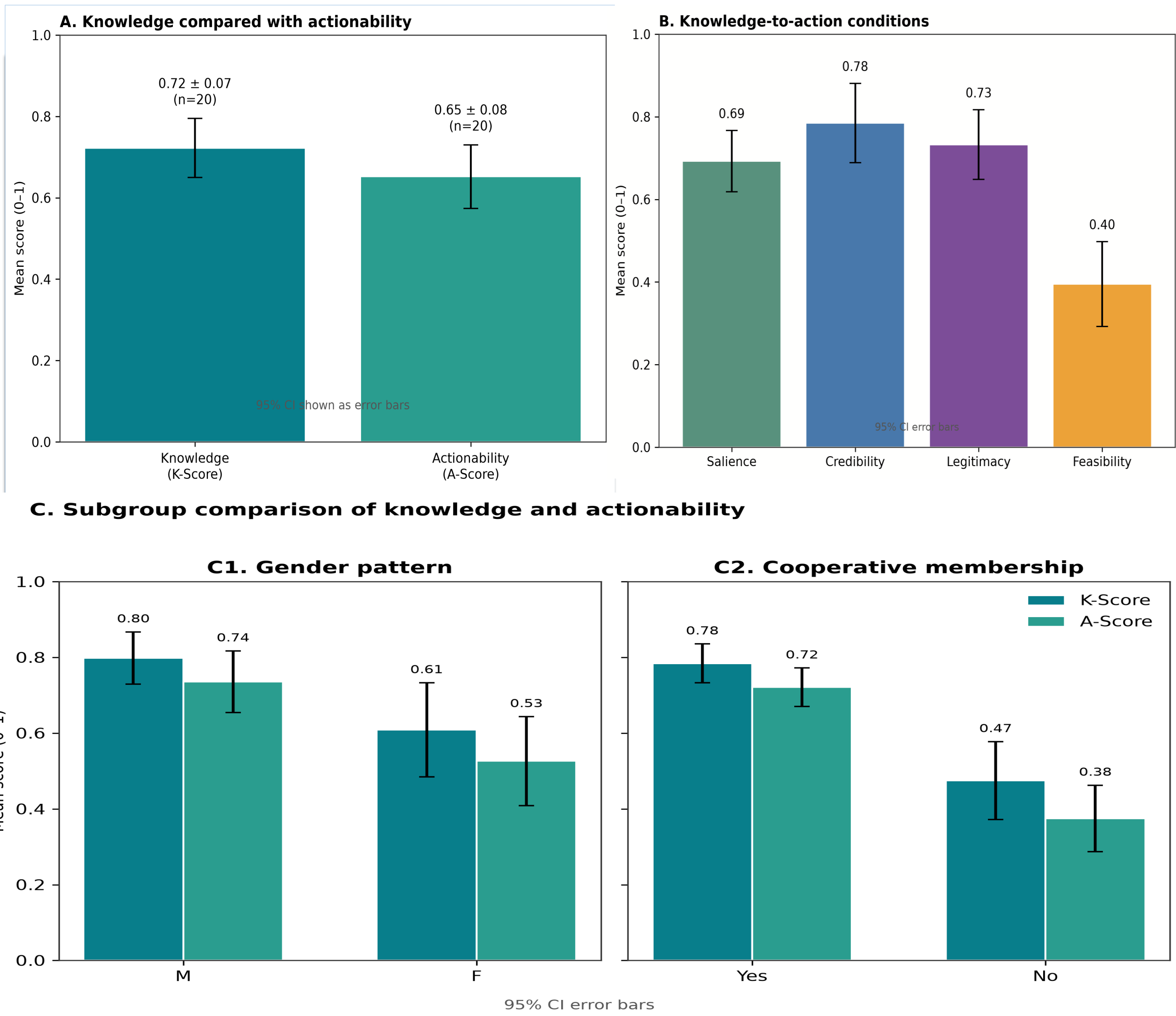
- Agricultural extension systems (AES) are conventionally evaluated on the basis of knowledge dissemination, implicitly assuming that information leads to adoption¹. However, persistent discrepancies between awareness and sustained practice suggest a more fundamental problem: knowledge often fails to translate into action².
- This study advances a data-driven reconceptualisation of extension effectiveness by operationalising the Knowledge–Action Gap (KAG) as a measurable construct within smallholder farming systems in Malawi.

METHODOLOGY.

- A mixed-methods design is employed, beginning with a pilot study (n=20) in Ntchisi District using a digitally administered instrument (Kobo Toolbox). A questionnaire and key informant interviews were administered. The tool generates two composite indices: a Knowledge Score (K-Score) and an Actionability Score (A-Score), enabling quantitative assessment of the transition from knowledge acquisition to sustained practice.

RESULTS.

- Study findings reveal a systematic divergence between knowledge and action. While farmers demonstrate relatively high knowledge levels (0.74), actionability remains lower (0.66), with feasibility emerging as the dominant constraint (0.39). This indicates the presence of a “feasibility trap,” in which knowledge is available but not implementable under prevailing resource constraints.



CONCLUSION.

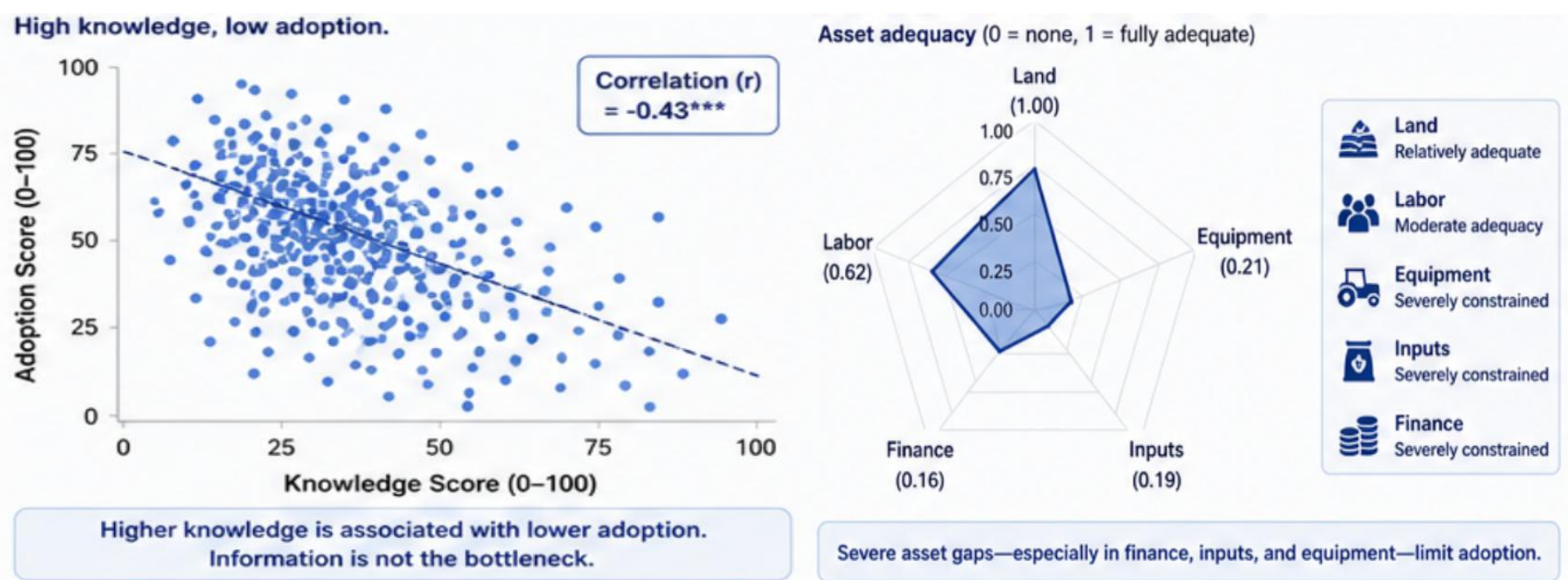
- These findings challenge linear models of extension and demonstrate that knowledge alone is insufficient to drive behavioural change. The study contributes methodologically by introducing a scalable diagnostic tool to evaluate knowledge systems and identify translation bottlenecks.
- The study argues for a shift from information delivery to data-informed, asset-sensitive extension design, with implications for improving resilience and inclusivity in line with Sustainable Development Goals (SDGs) 1, 2, and 13.

ACKNOWLEDGEMENTS

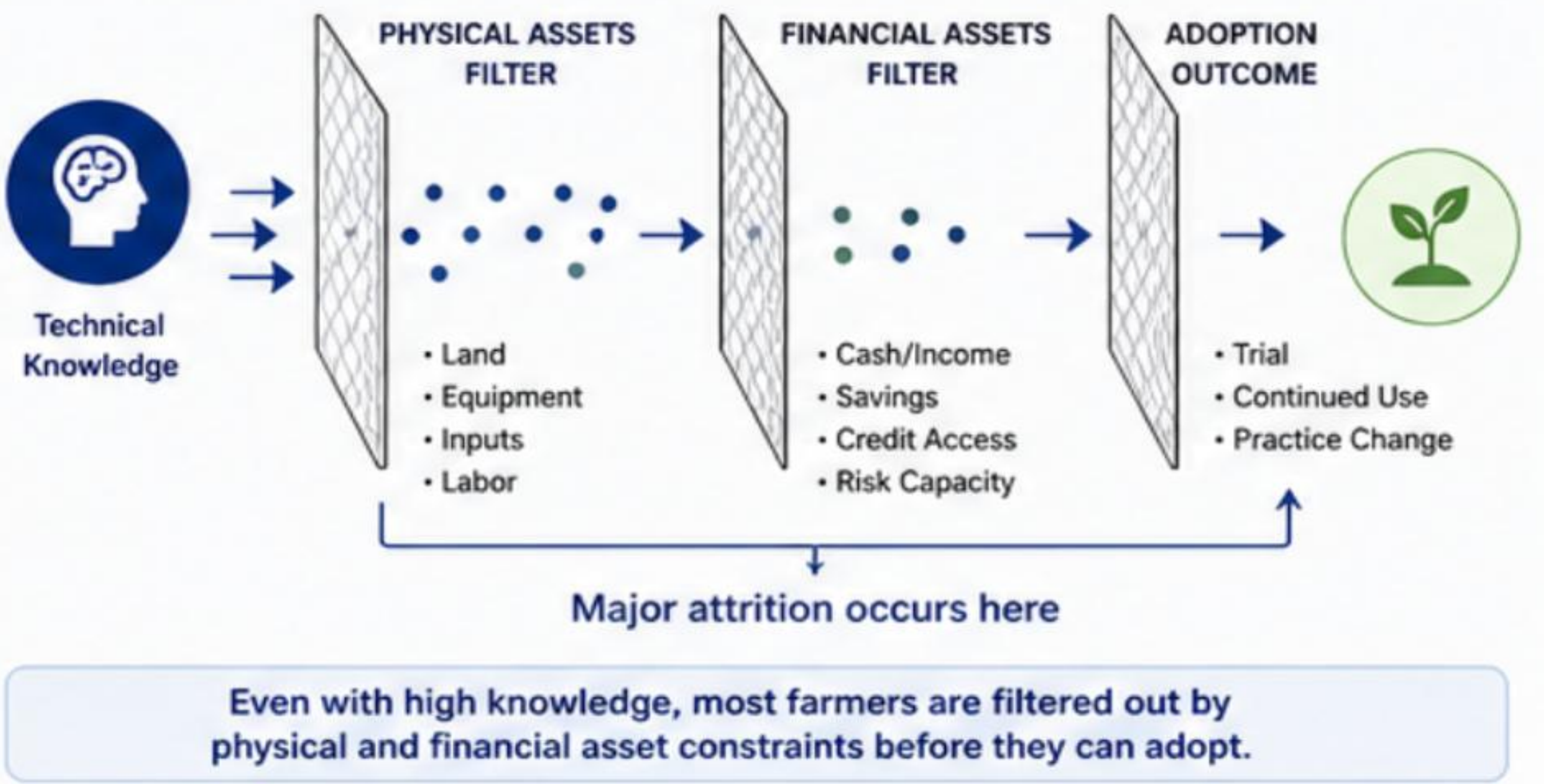
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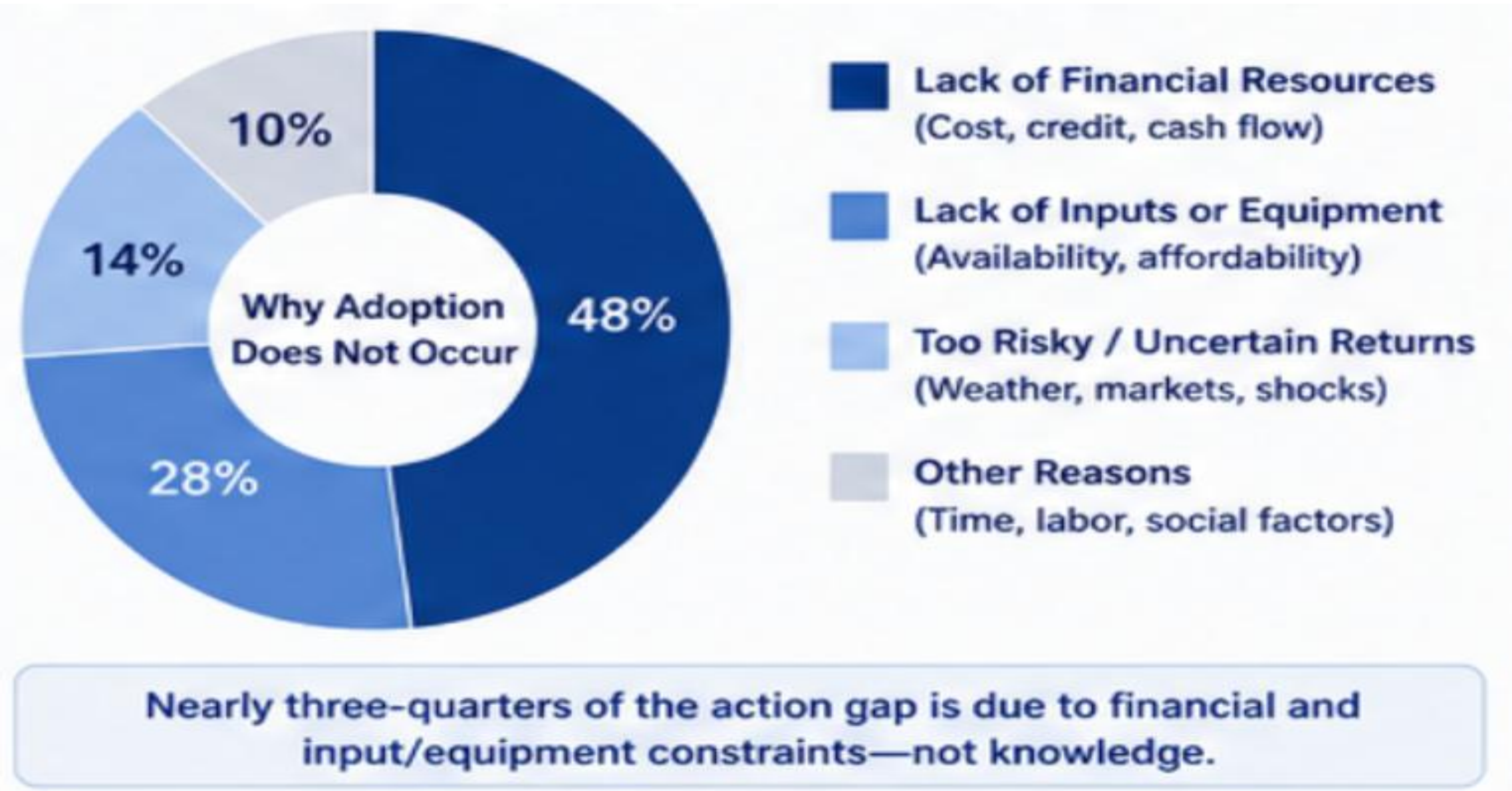
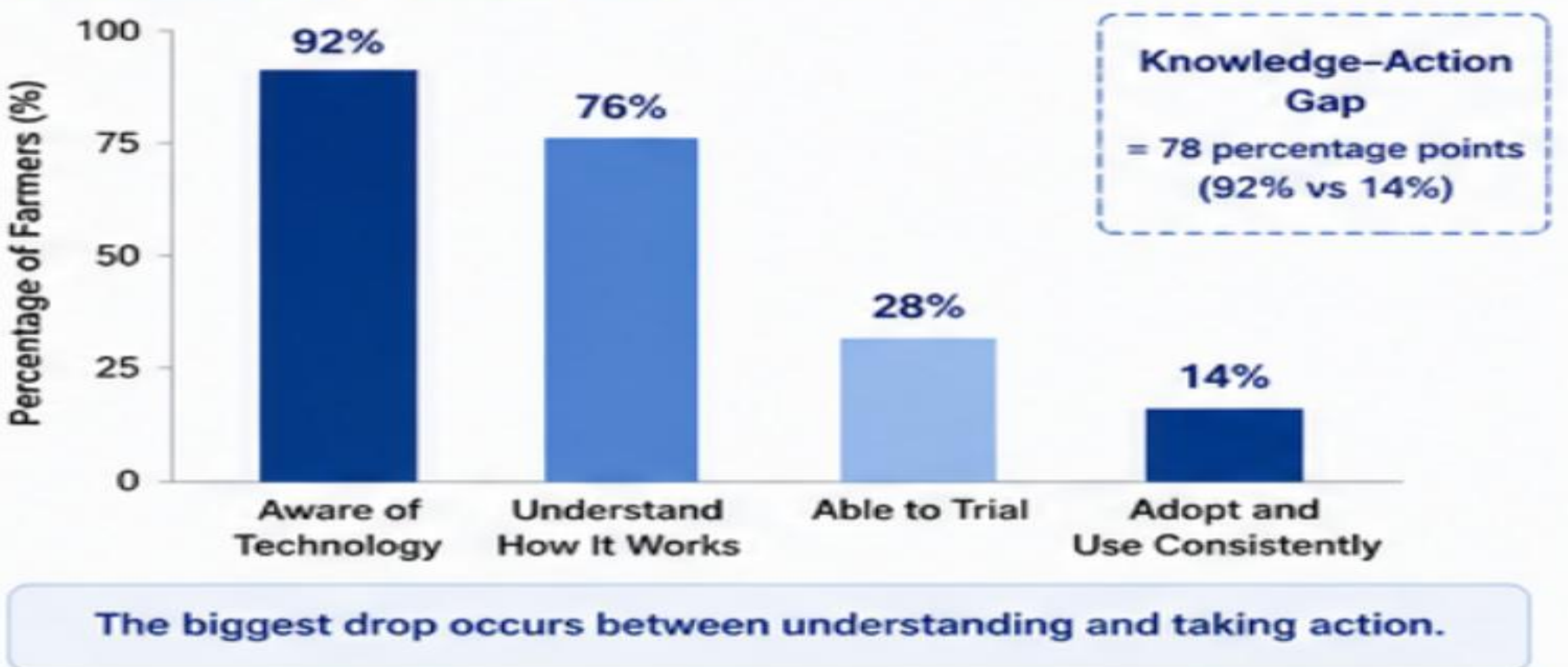
CONCLUSION...



From knowledge to action.



Awareness is high. Action is low.



REFERENCES

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