

Watershed Conservation-based Market Oriented Commodity Development: A Move Towards Resilient Farming?

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1. Introduction

Reversing watershed degradation and food insecurity has been one of the major challenges in the semi-arid areas of northern Ethiopia where the productivity of rainfed crop-livestock farming is very low. As an entry point, the conservation and enclosure of watersheds resulted in improved runoff retention in the upstream hilly sides, and surface and groundwater enrichment in the downstream of the watersheds. Along the conserved watershed resources gradient, knowledge and skill based market oriented commodity development interventions has been tested to improve the income of farmers.

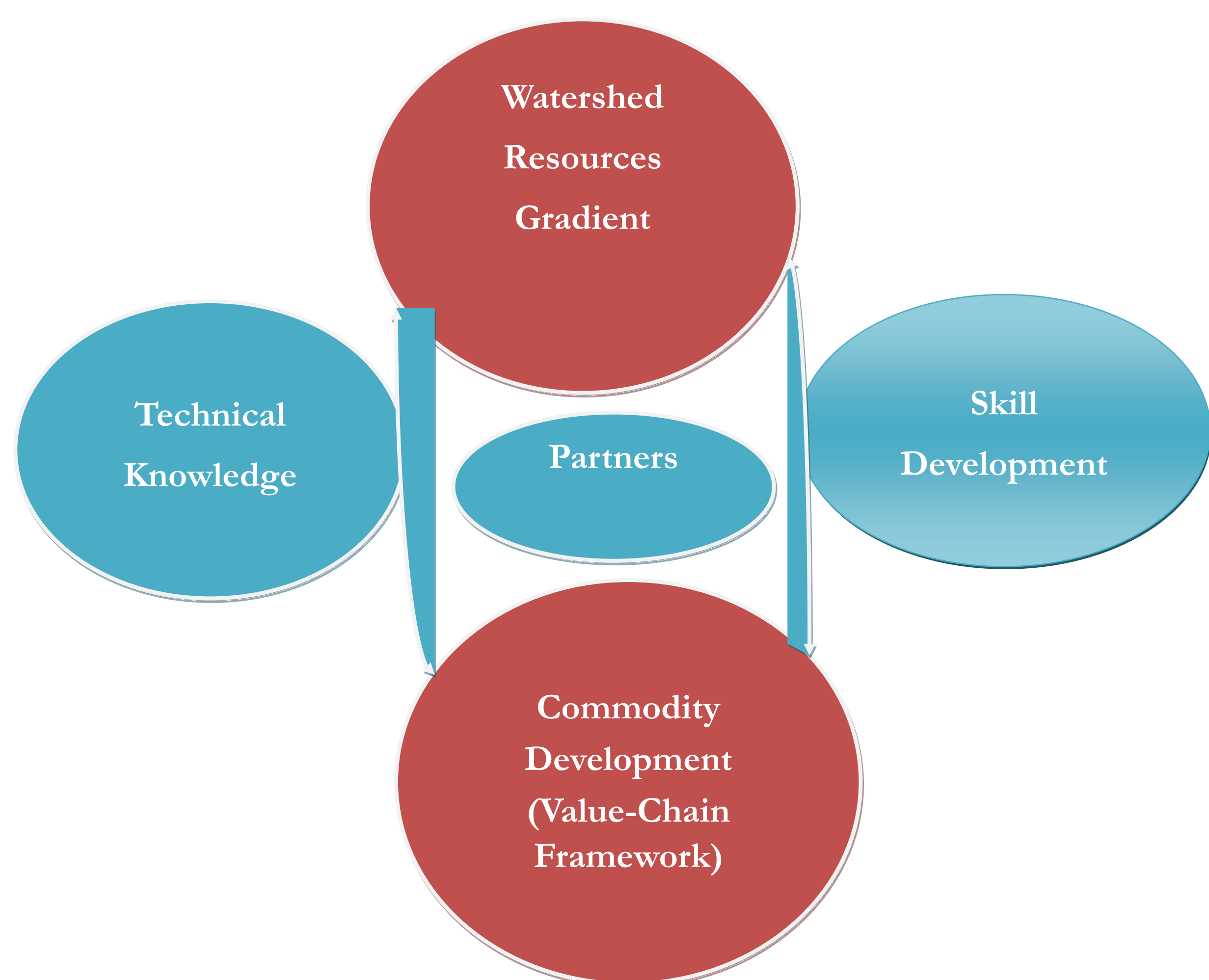
2. Interventions

2.1 Commodity development and watershed resources gradient

Market oriented commodity development integrated in synergy with watershed resources gradient: Beekeeping-upstream hilly sides, sheep fattening-bottomlands and high value irrigated crops-downstream of the watersheds.

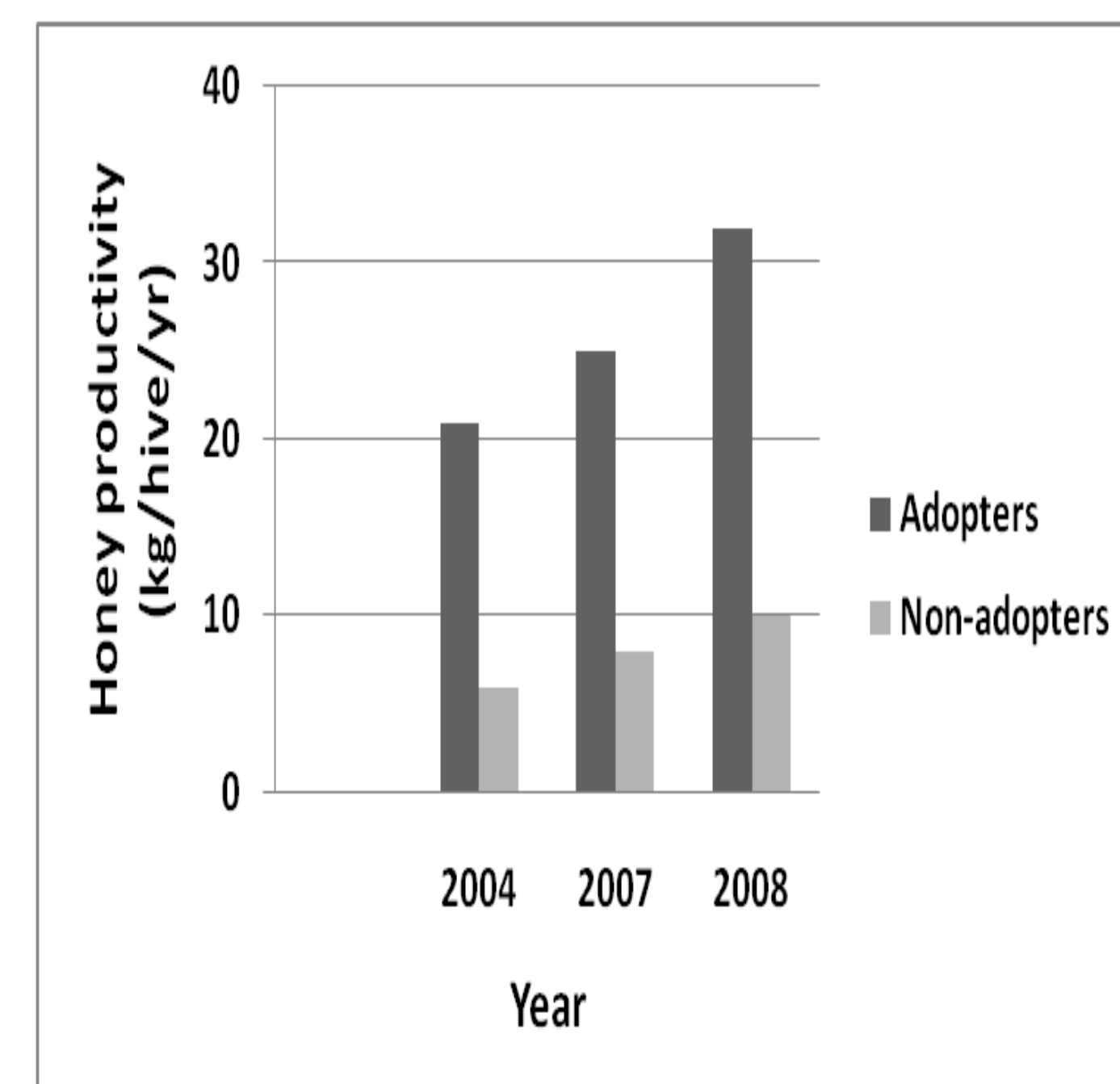
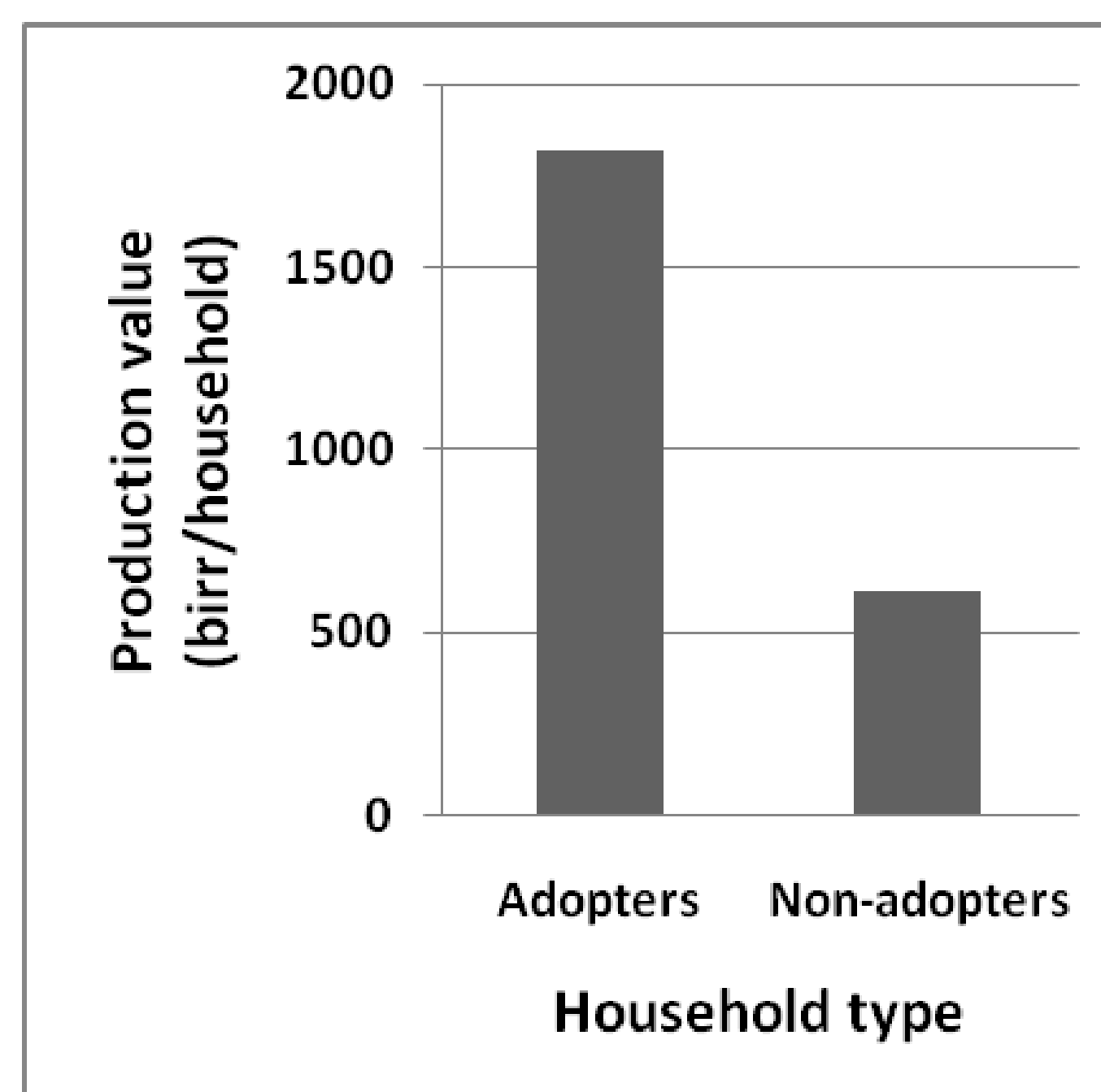


2.2 Market oriented commodity development along the value chain framework

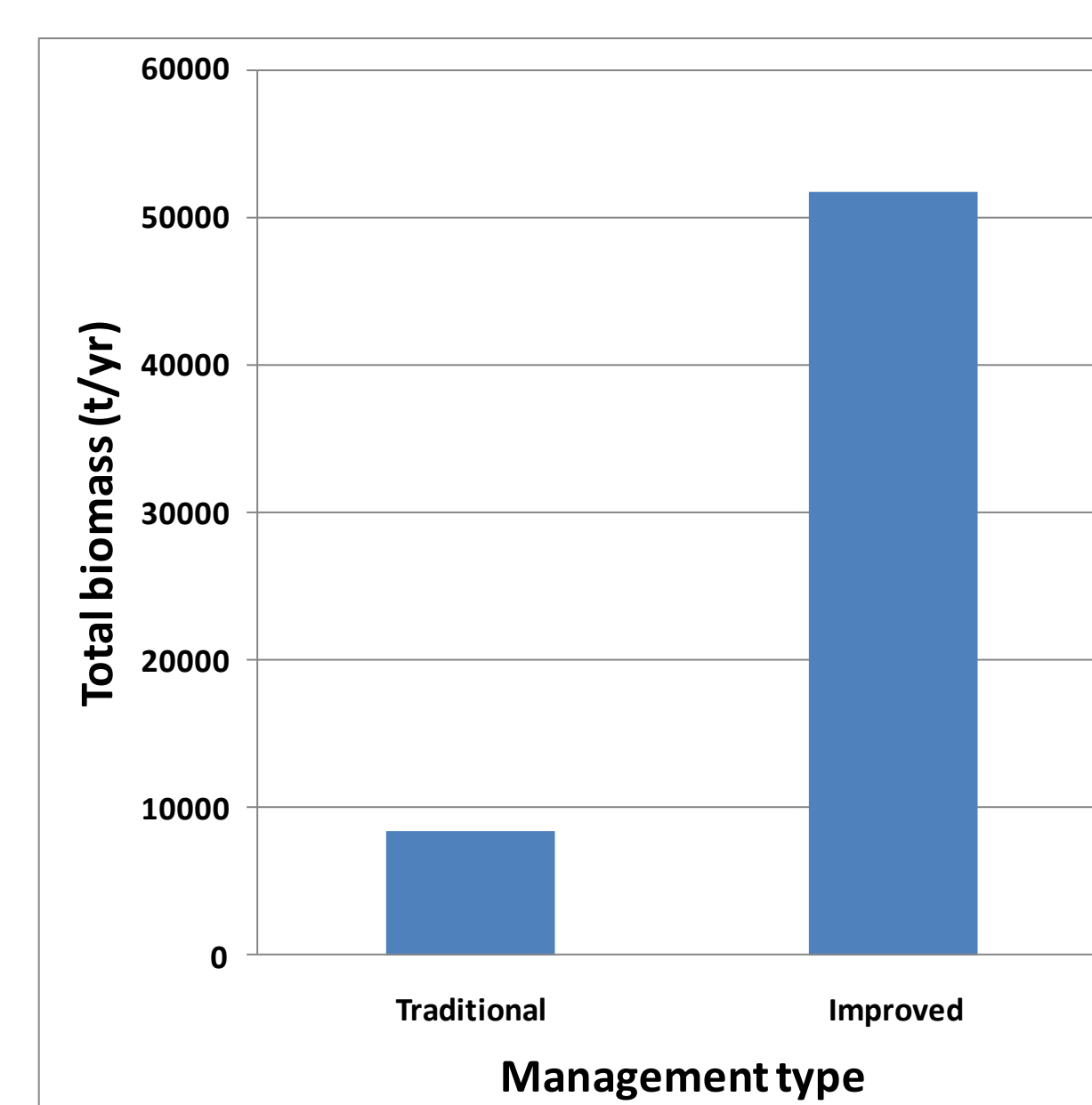
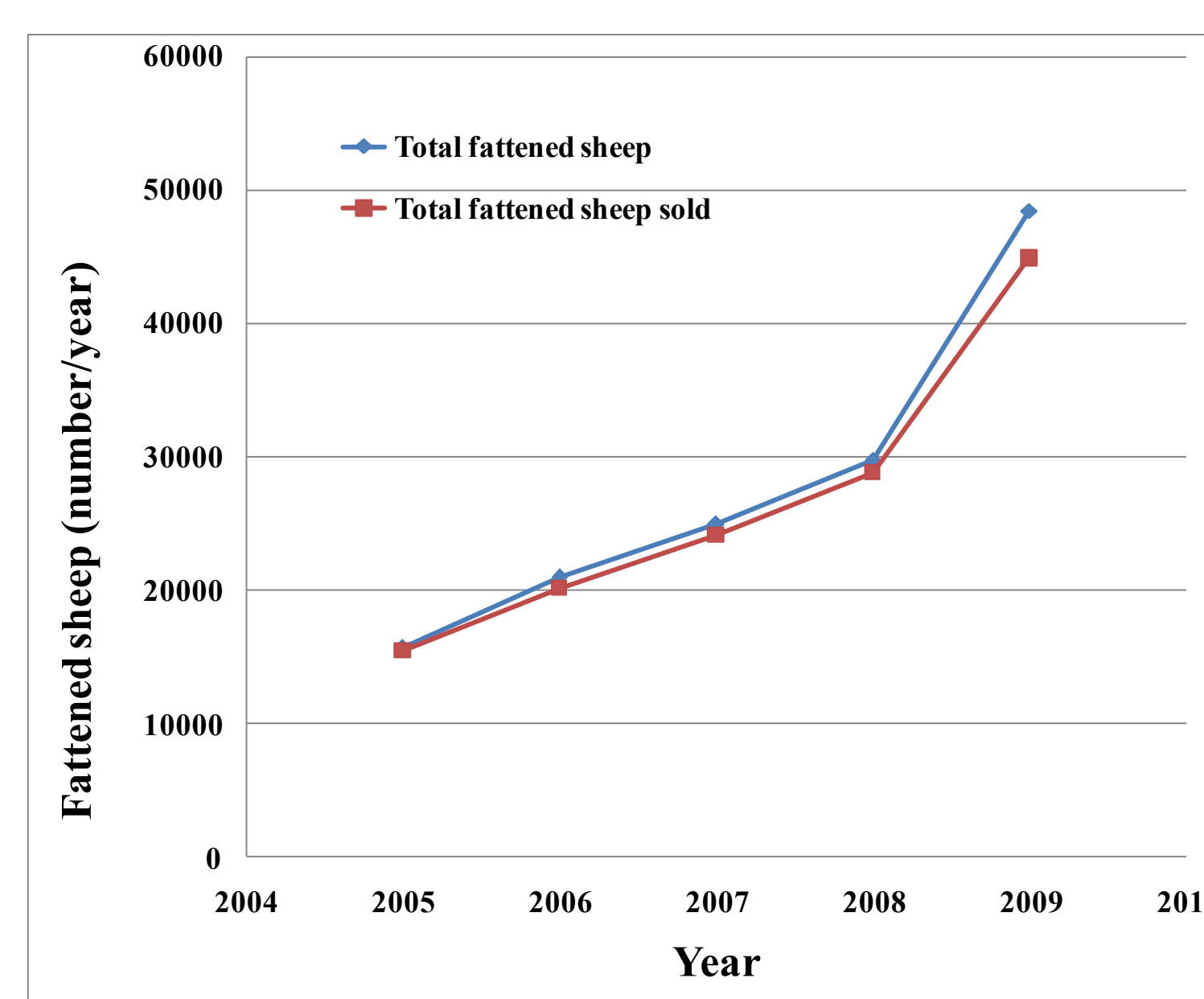


3. Results

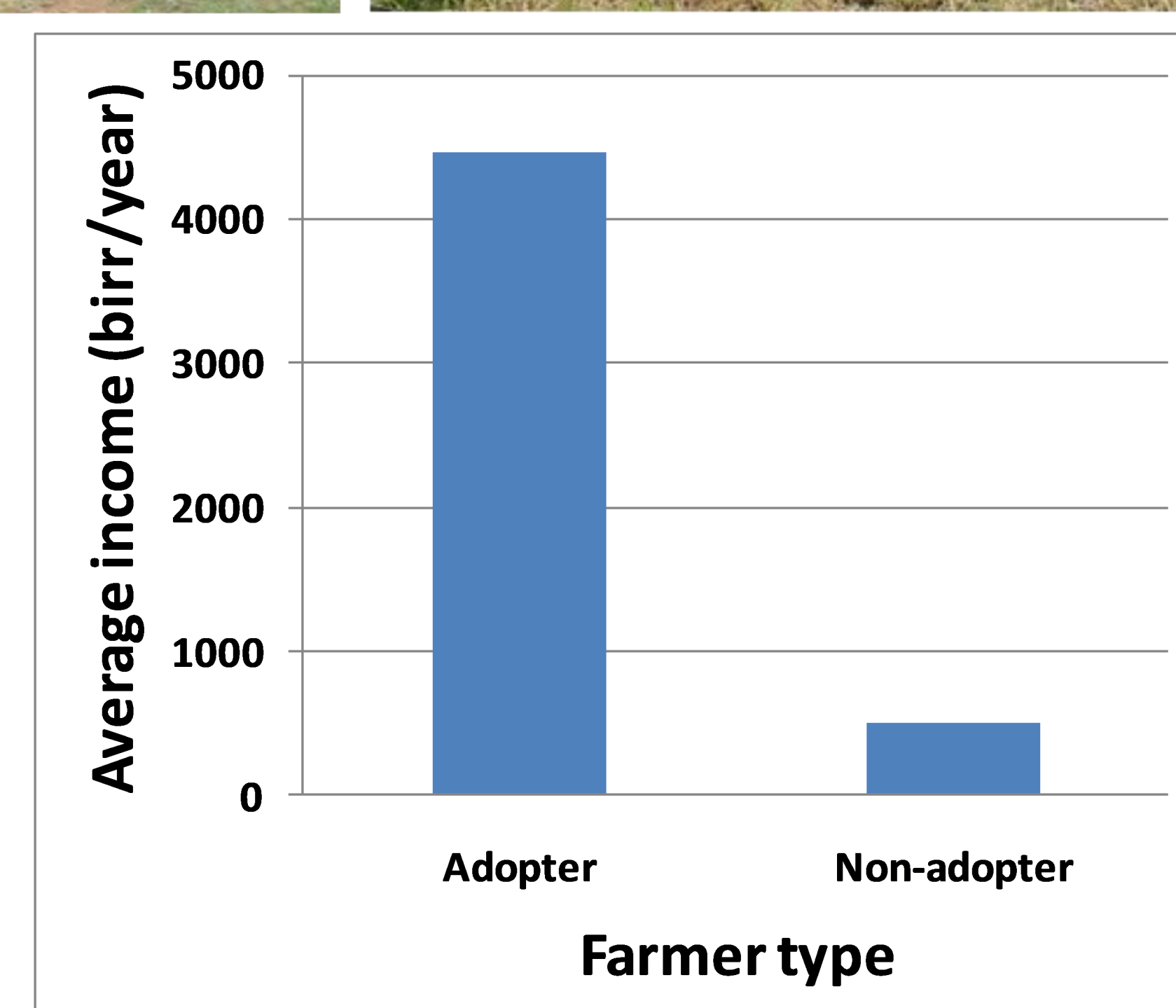
3.1 Beekeeping



3.2 Sheep fattening



3.3 High value irrigated crops



4. Conclusion

- Knowledge and skill based market oriented commodity development unlocks the use of conserved watershed resources gradient effectively and efficiently.
- The benefits trigger the community to re-invest and protect the watershed resources wisely.
- Improved income was recorded in the intervention watersheds when crops failed and livestock productivity declined in the non-intervention watersheds due to erratic rainfall.
- This imply that integrating market oriented commodity development in synergy with the conserved watershed resources gradient provides real income to farmers that is relatively resilient to extreme rainfall variability.