

# BMF CP69: Interactions between varying economic options and varying wherewithals in mitigating climate change and biodiversity loss consequences

*AISDL Team*

“By natural order, birthing needs good timing and at a moderate pace. [...] Looking for food in the fields and gardens farther from home is important. Also, try eating different kinds of nuts and worms. Mastering all of this would guarantee a prosperous life.”

—In “Food”; *The Kingfisher Story Collection* [1].

## 1. Project description

### 1.1. Main objectives

The current study is conducted to examine the following research questions:

*\*How do the economic patterns of farmers affect their climate-change-induced seasonal migration (during crop offseason)?*

Findings from this study are expected to contribute to promoting the eco-surplus culture for achieving innovative resilience policies [2-4].

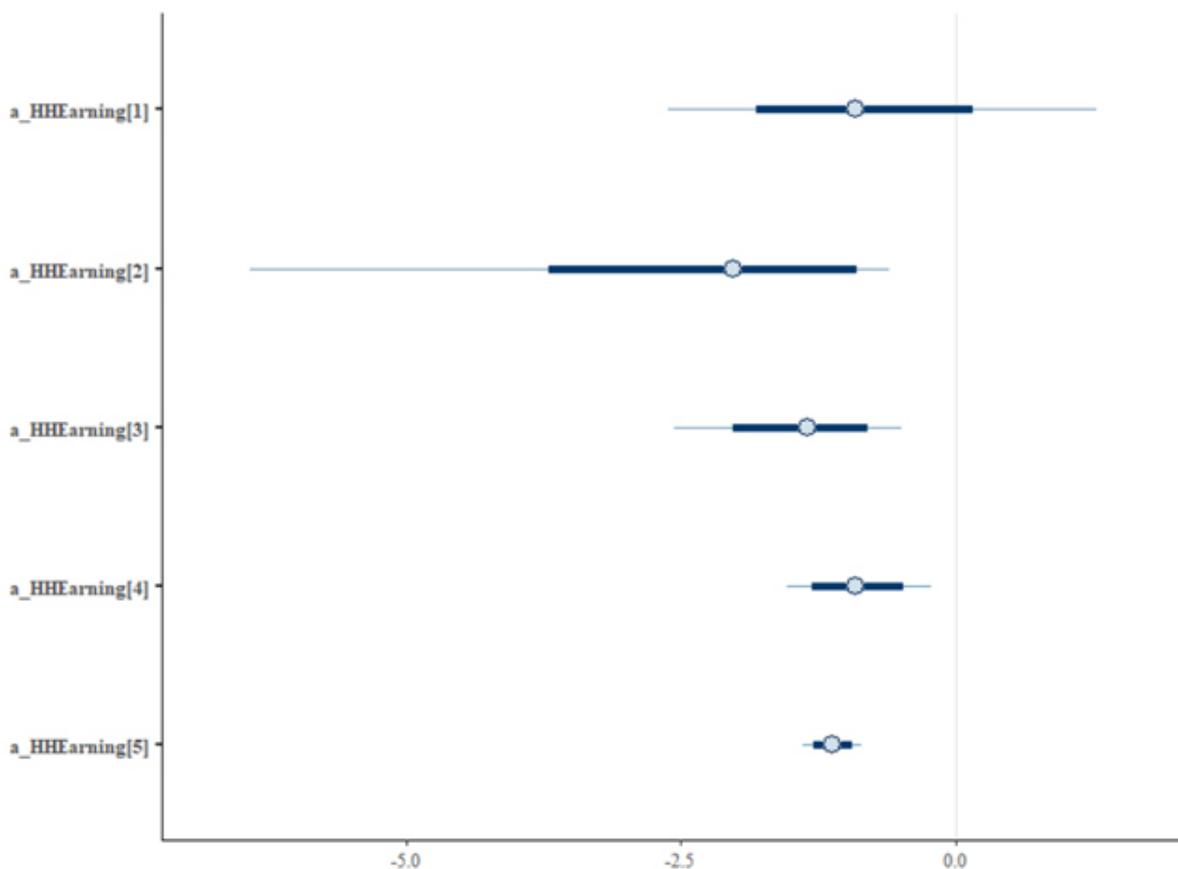
### 1.2. Materials

The mindsponge theory will be used for conceptual development, and Bayesian Mindsponge Framework (BMF) analytics will be used for statistical analysis on a dataset of 327 farmers in Sudurpaschim Pradesh (Far Western Province), Nepal [5-8]. The *bayesvl* R package, aided by the Markov chain Monte Carlo (MCMC) algorithm, will be employed for

statistical analyses [9]. For more information on BMF analytics, portal users can refer to the following book [10]. Data and code snippets of this initial analysis were deposited at <https://zenodo.org/records/10648603>.

### 1.3. Main findings

The preliminary analysis shows that households with different annual earnings will have varying seasonal migration patterns, which reflects a U-shape relationship between annual earnings and seasonal migration probability.



**Figure 1:** Estimated coefficients (using *bayesvl*)

## 2. Collaboration procedure

Portal users should follow these steps for registering to participate in this research project:

1. Create an account on the website (preferably using an institution email).
2. Comment on your name, affiliation, and desired role in the project below this post.
3. Patiently wait for the formal agreement on the project from the AISDL mentor.

If you have further inquiries, please contact us at [aisdl\\_team@mindsponge.info](mailto:aisdl_team@mindsponge.info)

If you have been invited to join the project by an AISDL member, you are still encouraged to follow the above formal steps.

All the resources for conducting and writing the research manuscript will be distributed upon project participation.

AISDL mentor for this project: **Minh-Hoang Nguyen**

AISDL members who have joined this project: Quan-Hoang Vuong.

The research project strictly adheres to scientific integrity standards, including authorship rights and obligations [11], without incurring an economic burden at participants' expenses [12].

## References

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