

CERES ABSTRACTS FOR THE THEME "HUMAN WELFARE AND DEVELOPMENT" ON 22-06-2017

Dear Personnel of the CERES selection committee,

I think my abstract is related to the theme of "Human welfare and Development" of the CERES call for abstracts.

Because, in this paper We wanted to explore the following issues:

- 1 . To quantify Bangladeshi vegetable farmer's quantify knowledge, attitude, past health experiences, perceived results and protective behaviours associated with pesticide use and vegetable farming practices.
2. To identify the factors affecting vegetable farmers' protective behaviours concerning pesticide use and lighten negative effects of pesticide use on public health and environment and
3. To recommend solutions and public policies to discourage unsafe pesticide use and improve farmers' protective behaviours with regards to pesticide use in Bangladesh.

Finally, I submitted my abstract for your kind consideration.
Waiting for your response.

Kind regards,
Mousumi

MOUSUMI AKTER CERES ABSTRACTS FOR THE THEME "HUMAN WELFARE AND DEVELOPMENT" ON 22-06-2017

VEGETABLE FARMERS' BEHAVIOUR AND KNOWLEDGE RELATED TO PESTICIDE USE AND RELATED HEALTH PROBLEMS: A CASE STUDY FROM BANGLADESH

M. AKTER¹ (MOUSUMI.AKTER@WUR.NL), L. FAN² V. GEISSEN¹, C. RITSEMA¹

1 Soil Physics and Land Management Group, Wageningen University, P.O. Box 47,
6700 AA Wageningen, The Netherlands

2 School of Surveying and Land Information Engineering, Henan Polytechnic
University, Jiaozuo, Henan 454003, China

Proper pesticide use is crucial to farmers' health and environmental protection. However, the factors affecting a farmer's behaviour with regards to pesticide use remain largely unknown in Bangladesh, particularly for vegetable farmers. Hence, we investigated the use of pesticides by vegetable growers amongst 101 households in an important vegetable growing area in the Jamalpur district in Bangladesh. Therefore, our study aims to (1) quantify knowledge, attitude, health experiences, perceived results and protective behaviours associated with pesticide use and farming practices; (2) identify the factors affecting vegetable farmers' protective behaviours concerning pesticide use and lighten negative effects of pesticide use on public health and environment (3) recommend solutions and public policies to discourage unsafe pesticide use and improve farmers' protective behaviours with regards to pesticide use in Bangladesh. The majority of vegetable growers have long-term experience with pesticide use and are involved in full-time vegetable growing. However, even with this long-term experience, these growers continue to suffer with toxicity symptoms during pesticide application. Vomiting and headaches are the most frequent symptoms. Amongst eight possible protective behaviours reported to be known by the farmers, only three were frequently adopted. The low level of education, the lack of knowledge and training and the pursuit of high profits were found to be the main reasons for the inadequate use of PBs. The PBs of the vegetable growers were highly affected by their knowledge and past experiences of toxicity. The PBs were also weakly affected by the farmers' attitude towards pesticide use. Community-based participatory training and education programmes for farmers must focus on the farmers, particularly the older farmers, since they are the core players that can benefit from learning how to safely use pesticides. The programme would cover both content and process dimensions during training and education. Meanwhile, information transparency based on interactive and participatory supervision from both government and non-government authorities should be considered as an important tool for introducing the bottom-up approach amongst authorities.