Comment Form [FS]

February 13, 2019

Title of the Study	Study of Behavior Modification of Public People by Sharing Daily Activity and Air Quality Information toward Clean Air and Promoting Public		
	Health		
Research Term	FS	FS Manager	Hayashida Sachiko

General advice and comments of the EREC:

The project is to address an important problem: air pollution and its impact on human health in North India, with a particular focus on reducing stubble burning in the Punjab as a possible solution. The Committee found the proposal considerably improved and feels it is of sufficient quality to go to the Full Research phase. The following comments were given for the team to consider as the project begins its preparations.

Currently, there is a strong focus on exploring and understanding the causal mechanisms, the sources of pollution and their relative contribution to the overall problem and the impact on health. From this, several questions arise that will need to be addressed: How to organize the health impact research? How to separate the local health impact of stubble burning from other sources of (indoor and outdoor) air pollution? What data need to be collected to establish these connections? What is the relative contribution of stubble burning to air pollution and health problems in the wider area towards Delhi? However, the real challenges for the project, both in terms of science and practice, lie in the domain of Working Group 1, which will strive to change farmers' behavior to reduce stubble burning. This includes new technical solutions, but there is also a need to understand why the farmers behave in the current way and why the existing technical solutions are not adopted. Therefore, it will be useful to strengthen the team with expertise in anthropology and regional studies. The issue of behavior change also entails an important challenge for transdisciplinary research: ultimately the project needs to not tell farmers what to do, but to develop solutions in collaboration with them.

It will also be important to strengthen the integrative components of the project, both across working groups and in particular within Working Group 1. A stronger conceptual framework for Working Group 1, such as social technical system innovation and transition, would help.

The Committee flagged the need to place the research in the wider context. This includes the historical development of the political economy of agriculture in the Punjab: How did the Punjab develop modern agriculture with rice and wheat cultivation? What is the underlying economic structure of rice growing?

What pressures are there on water availability and management? This requires exploration of government policies, subsidies, incentives, market integration, and in broader terms, the incorporation of farms into the capitalist system. Finally, the research needs to be located in the situation of stubble burning worldwide. How does the Punjab compare with approaches to stubble burning in other regions? What has worked and not worked elsewhere? Can the project link up with researchers working on this issue in other areas?