ZBNF *Social Science*

Zero Budget Natural Farming in Andhra Pradesh, India

Zero Budget Natural Farming (ZBNF) is a grassroots agrarian movement in Andhra Pradesh (AP), India. It is a low-cost, locally-sourced natural farming method that does not rely on the use of agrochemicals and has the potential to meet the twin goals of global food security and conservation of the environment. ZBNF launched in 131 village clusters in 2016 and has since expanded to 268 clusters. To fully explore the potential of ZBNF as an agricultural strategy, empirical research is being done to understand the social dynamics and scientific processes taking place through the farming method.

BACKGROUND

High levels of farmer debt and the phenomenon of farmer suicides in India have made finding low-cost agricultural strategies fundamental to rural wellbeing and development. Zero Budget Natural Farming (ZBNF) acts to address these problems. It is a regenerative agricultural practice, which addresses the problem of soil degradation while being low-cost, mitigating the problem of farmer debt. The widespread adoption of ZBNF has the potential to enhance the livelihood resilience of smallholder farmers to climate and land use change, while increasing their income and food security, and improving soil fertility.

INTERDISCIPLINARY RESEARCH APPROACH

An interdisciplinary team of soil and social scientists from the University of Reading are working to develop an evidence base to understand the strengths and weaknesses of the ZBNF approach, to what extent that success has come from context-specific conditions, and whether there are principles that could be useful in other geographic and cultural areas.

SUMMARY OF SOCIAL SCIENCE METHODOLOGY

ZBNF is being implemented by Rythu Sahikara Samstha (RySS), a non-profit organization established by the state government, which works through a model that engages a network of trained farming fellows, resource persons, and champions of the ZBNF program to work in village clusters, primarily with women's self-help groups (SHGs). The social science investigation team, using research methods such as gender-disaggregated participatory innovation timelines and mapping, and a Freirean participatory photography praxis, are analyzing the communication and learning dynamics of smallholder women farmers to understand decision making, paths of knowledge exchange, innovation processes, and the root causes behind adoption decisions making amongst ZBNF participants in our three research settings, each representing a different agroecological zone in Andhra Pradesh.