

# **EMPOWERMENT OF SANGGRAHAN, PURWOMARTANI VILLAGE YOUTH ORGANIZATION AS ASSISTANCE OLD FARMER THROUGH TRAINING AND APPLICATION OF AUDIO BIO HARMONIC SYSTEM TECHNOLOGY TO INCREASE FOOD CROP PRODUCTIVITY**

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## **ABSTRACT**

In general, the community service (*pengabdian kepada masyarakat* – PKM) activities based on the results of this research aimed to disseminate the Audio Bio Harmonic System (ABHS) technology, which is environmentally friendly, inexpensive, and can be widely applied to increase the productivity of food crop farmers youth organization . Furthermore, the specific objectives of this research-based PkM were (1) increasing the knowledge capacity of youth group by utilizing environmentally friendly ABHS technology as part of efforts to maintain national food security, (2) training and mentoring of ABHS as an environmentally friendly technology adapted to the characteristics of potential plants in Indonesia. The strategic target audience for this community service activities based on the results of this research is a youth organization of farmers in Padukuhan Sanggrahan, Purwomartani village, Kalasan sub-district, Sleman district. The method used was training and assistance for farmers in utilizing ABHS technology as a result of research funded since 2010 until now, which is in accordance with the research roadmap.

The number of farmers who participated in the training was 20 youth group farmer representatives and became a strategic intermediate target in the dissemination of ABHS technology resulting from the research. The research-based PKM activities can be seen via YouTube channel with link <https://youtu.be/n6-9zPV1S6o>, which has a positive impact in increasing farmers' knowledge and understanding through a study of the results of scientific research on the effect of environmentally friendly sound technology on food crops. From the process aspect, the farmers were enthusiastic, and able to understand and operate the ABHS tool correctly so that they felt it to be useful for increasing food crop production. From the aspect of mentoring, this research based-PPM activities were useful as part of follow-up activities in a wider scope. The end result of using ABHS technology is that the production of food crops increases more than the previous planting period so that it can increase the income level of farmers.

Kata Kunci: *Youth Group, PKM DKL, ABHS, Productivity*