Activity First year Second year Third year 1 st 2nd 1 st 2nd 1 st 2nd half half half half half half Survey and sample collection **Community DNA extraction** Next generation sequencing of 16S rRNA gene and ITS regions Bioinformatics analysis to identify the tea rhizosphere microbiome Isolation of dominant members of microorganisms from tea rhizosphere Screening for multiple plant growth promoting attributes Identification of newly isolated microorganisms using MALDI-TOF MS and sequencing Development of bioinoculant formulations based on tea core microbiome information, and strains with multiple plant growth promoting activities Evolution of microbial formulation in pot and field studies Survey will be conducted to assess the socioeconomic condition in different regions Conducting seminars and meetings to educate the tea growers about sustainable means of tea cultivation Microbial formulations will be distributed among tea growers Training tea workers for production and application of biofertilizers

(e) Time Frame [with WBS and Gantt Chart showing each Activity and sub components]