1st Month - 3rd Month = Planning , 17thMonth - 18th Month = Monitoring and Evaluation

Key Action Steps	Start Time	End Time	Expected Outcome	Data Source and Evaluation Methodology	Person/Area Responsible	
1. Data Collection -Gather data on dependent variables, e.g., number of mosquitoes collected, malaria infection status -Collect independent variables, including house-related, landscape/environmental, and larval habitat-related factors, using remote sensing technology,	4th Month	16th Month	Establishment of a reliable "Infection risk index" that	1.Dependent variables: Data collection 2. Independent variables: Data collected using drones	1. Research and Technical Team 2. Drone-based data collection is in charge of SORA Technology	
2.Data Analysis - Apply Principal Component Analysis (PCA) to reduce the dimensions of independent variables and cluster houses based on dominant components Utilize Partial Least Squares (PLS) Regression to identify significant factors predicting infection risk index (HIRI).	4th Month	16th Month	incorporates both dependent and independent variables, improving the accuracy of HIRI.	3.PCA and PLS Regression: Analytical methods for data reduction and prediction.	Research and Technical Team	
Key Action Steps	Start Time	End Time	Expected Outcome	Data Source and Evaluation Methodology	Person/Area Responsible	

1. Policy Discussion: - Evaluate how drone- based monitoring can improve the cost- effectiveness of vector control strategies (LLIN, IRS, and LSM) in Sierra Leone.	12th Month	16th Month	Policy recommendations on optimizing vector control strategies through dronebased monitoring.	Policy discussion and analysis.	Research Team and Policy Experts.		
Key Action Steps	Start Time	End Time	Expected Outcome	Data Source and Evaluation Methodology	Person/Area Responsible		
1. Community Engagement: -Conduct qualitative- based surveys and community meetings to understand local perceptions and acceptance of the "drone against malaria" project.	4th Month	16th Month	Deepened understanding of community acceptance and stakeholder engagement strategies to enhance project effectiveness and sustainability	1. Qualitative surveys and community engagement.	Research Team		
2. Stakeholder Analysis: - Identify and categorize key stakeholders based on their influence and importance in the project Develop engagement strategies for different stakeholder groups.	4th Month	16th Month		2. Stakeholder analysis	Community Engagement Team and Stakeholder Engagement Team.		
Key Action Steps	Start Time	End Time	Expected Outcome	Data Source and Evaluation Methodology	Person/Area Responsible		
Training Programs Develop and implement training programs for local technicians and healthcare workers	4th Month	16th Month	Enhance Local capacity and expertise in operating, Managing and maintaining drone-based	Assessment of training programs and skill development.	Training Team, Training Instructors & Program Coordinators. Training program of		
Hands-on Training Provide practical, hands-on training for	4th Month	16th Month					

drone-based interventions			interventions effectively.	drone-based data collection will
3. Continuous Learning - Establish ongoing learning and skill development mechanisms	4th Month	16th Month		be provided by SORA Technology