

Table S1. Key benefits and weaknesses of the Climate-Smart Village components listed by farmers, local authorities and Ma CSV project managers.

	Farmers	Local authorities	Project managers
Technologies & Practices	<p>Benefits</p> <ul style="list-style-type: none"> - Increase in productivity - Increase in income - Better waste management, decrease pests and diseases & smell - Some T&Ps easy to implement <p>Weaknesses</p> <ul style="list-style-type: none"> - Some T&Ps only moderate production increase - Most T&Ps constraints in time, labour, finance that limit uptake or cause farmers to stop - Some inconvenient features 	<p>Benefits</p> <ul style="list-style-type: none"> - Increase in productivity - Save money - Better waste management, decrease pests and diseases - T&Ps suitable for village & based on farmer needs - Bottom-up approach <p>Weaknesses</p> <ul style="list-style-type: none"> - Only raise productivity, does not address climate risks - Only cover some aspects, did not cover forestry and aquaculture - Most adopted T&P was for animals, not crop 	<p>Benefits</p> <ul style="list-style-type: none"> - Some T&Ps scientifically proven to work in the field trials and papers were published - T&Ps fulfil at least one CSA pillar - T&Ps helped the village adapt to climate risks <p>Weaknesses</p> <ul style="list-style-type: none"> - Did not get to prove all T&Ps - Challenge to balance CSA pillars
Climate information services	<p>Benefits</p> <ul style="list-style-type: none"> - Very convenient in the morning before going to the field <p>Weaknesses</p> <ul style="list-style-type: none"> - The service ended 	<p>Benefits</p> <ul style="list-style-type: none"> - Convenient - Reach all farmers in the village <p>Weaknesses</p> <ul style="list-style-type: none"> - Not sustainable and ended when funding ran out - Not effective since same information as on TV & online - Provided more work for hydro-met officers 	<p>Benefits</p> <ul style="list-style-type: none"> - Able to provide short term forecast <p>Weaknesses</p> <ul style="list-style-type: none"> - Not sustainable and ended when funding ran out - Short term forecast & no agro-advisory - Manual and inefficient to provide forecast
Village development plans	N/A	N/A	N/A

Local knowledge	<p>Benefits</p> <ul style="list-style-type: none"> - Researchers listened to and encouraged farmers to voice opinions and needs - Researchers tried to follow farmers' suggestions <p>Weaknesses</p> <ul style="list-style-type: none"> - Not all farmers participated in meetings - Some unaware of decision-making processes 	<p>Benefits</p> <ul style="list-style-type: none"> - Farmers were involved in meetings - Farmers enthusiastically gave opinions and suggestions 	<p>Benefits</p> <ul style="list-style-type: none"> - Always discussed with farmers and considered their experience and needs when deciding on T&Ps - Did not impose anything - Farmers use their own knowledge to modify T&Ps to better fit their needs <p>Weaknesses</p> <ul style="list-style-type: none"> - Improved varieties were not local varieties
Other	<p>Benefits</p> <ul style="list-style-type: none"> - More aware about climate change and the environment - More initiative to find information - Library for socialising and knowledge - Better social relationship in the village - Use less chemical fertiliser - Better disposal of pesticide boxes 	<p>Benefits</p> <ul style="list-style-type: none"> - Farmers more aware of climate change and the environment - More initiative to find information and implement new practices - Library for socialising and knowledge - Better social relationship in the village - Half industrial and half natural food <p>Weaknesses</p> <ul style="list-style-type: none"> - Need everyone in the village to follow the same practices - Province level not sufficiently involved 	<p>Benefits</p> <ul style="list-style-type: none"> - Fund to help poor farmers afford a cow - Farmers given the opportunity to both teach and learn about CSA at other villages and regions in Vietnam via roving workshops, helping to expand their knowledge and confidence <p>Weaknesses</p> <ul style="list-style-type: none"> - National government level uninvolved, unaware of needs at national level

CSV: Climate-Smart Village; T&P: Technology & Practices; CSA: Climate-Smart Agriculture