

**Landscape Crop Assessment Survey (LCAS): Community Questionnaire for
Baseline of KERA – Catalyzing transitions to low-emission rice-based systems in
Kerala**

Informed Consent:

Greetings!!! My name is _____, and we are students from the Kerala Agricultural University. We are conducting the baseline assessment of crops and landscapes for the project KERA – Catalyzing transitions to low-emission rice-based systems in Kerala” program of Government of Kerala in collaboration with Kerala Agricultural University and International Rice Research Institute IRRI). Thank you for taking time out of your busy schedule to sit with us today. Your participation will help us understand your current cultivation practices and opportunities for improvements in different aspects of cultivation.

This survey may take about 45 minutes. Your participation in the survey is voluntary. We may not guarantee any immediate direct benefits to you or your padasekharam by participating in the survey; neither will there be any penalty/risk imposed if you do not want to participate. However, the insights that we gain from your padasekharam will help us design the implementation of KERA project which will benefit the rice farmers of Kerala.

There are no right or wrong answers to the questions asked during the survey. Your viewpoint will be valuable in the survey. Your identity and all the information you provide will be kept confidential, and these will be used for project purposes only.

You are free to ask me any questions now or later regarding this survey. I'll begin the survey only with your permission. May I have your consent?

Yes -----1 (BEGIN THE SURVEY)

No -----2 (TERMINATE)

Section A: General details

A 1	District			1 = Palakkad 2 = Thrissur
A 2	Block			
A 3	Panchayat			
A 4	Name of Padasekhara samithi (PSS)			
A 5	Location of the padasekharam viz-a-viz canal (tertiary)			1= Head; 2= Middle; 3 = Tail end
A 6	Name of the respondent			
A 7	Position of the respondent in the padasekhara Samithi			
A 8	Year of formation of padasekhara Samithi			
A 9	Number of male farmers in the padasekhara Samithi			
A 10	Number of female farmers in the padasekhara Samithi			
A 11	Number of male executive members in the padasekhara Samithi [If A7 is >0]			
A 12	Number of female executive members in the padasekhara Samithi [If A8 is >0]			
A 13	Number of wards in the padasekhara Samithi			
A 14	Are there water user association in your rice area?			1 = Yes 2 = No
A 15	Is somebody from this padasekhara Samithi represented in the water user association? [if A13=Yes]			1 = Yes 2 = No
A 16	Total paddy area under the padasekharam (acres)			
A 17	Paddy area under the padasekharam (acres) in different seasons			
	Season	Area (in acres)	Major varieties cultivated	Average yield (tons per acre)
	Virippu (2024)			
	Puncha (2024-25)			
Mundakan (2024-25)				
A 18	Area under the padasekharam not cultivated in virippu? (acres)			
A 19	Area under the padasekharam not cultivated in mundakan? (acres)			
A 20	What is the primary irrigation source for the padasekharam			1 = canal 2 = ground water 3 = lift irrigation (streams/river/lake) 4 = other (specify)
A 21	What is the secondary irrigation source for the padasekharam			
A 22	Does the PSS own a pump house?			1 = Yes 2 = No
A 23	Does the PSS own a storage facility?			
A 24	Do you have any other assets for padasekharam? (excluding pumps, which we will ask in the next session)			1 = Yes 2 = No
A 25	If yes to the assets, please list (prepare lists) Machineries, threshing yards, etc.			

Section B: crop and water management at Padasekharam

	What are the crop management practices undertaken by the padasekhara samithi		
B 1	QNo	Crop management	PSS contribution
	B1. 1	Variety choice and seed procurement	1 = decision and implementation by PSS 2 = agreement at PSS, implemented by individual farmer 3 = decision and implementation by individual farmer
	B1. 2	Synchronized nursery establishment	
	B1. 3	Tillage and field preparation for transplanting or broadcasting	
	B1. 4	Synchronized transplanting	
	B1. 5	Synchronized fertilizer application	
	B1. 6	Synchronized water management/irrigation	
	B1. 7	Synchronized pesticide application	
	B1. 8	Synchronized harvesting (e.g. combine harvester)	
	B1. 9	Labour arrangement for weeding, fertilizer application, transplanting, etc.	
	B1. 10	Marketing	

	What are the water management practices undertaken by the padasekhara Samithi?	
B 2	QNo	Water management
	B2. 1	Condition of the canal in the field 1= Well-maintained 2= Needs minor repairs 3 = Needs major repairs 4 = Poor and non-functional
	B2. 2	Who manages the field canal that goes to your padasekharam 1= Irrigation department 2 = Panchayat 3 = Water user association 4 = padasekhara Samithi 5 = Agriculture department 6 = Individual farmer
	B2. 3	Is there a functional water user association in your padasekharam area? 1=yes 2 = No
	B2. 4	How is irrigation water allocated to the canal to your padasekharam? 1 = Fixed schedule 2 = Rotational system 3 = On-demand basis 4 = Other (specify)
	B2. 5	Do you get information in advance on irrigation schedules from irrigation department 1=yes 2=No
	B2. 6	Are there any members from your padasekhara samiti part of irrigation scheduling decision making? 1=yes 2=No
	B2. 7	If need be, can your influence irrigation department to discharge water to your canal? 1= Yes 2 = No 3 = Sometimes
	B2. 8	How can you describe the irrigation behaviour of farmers in your padasekharam? [multiple choice] 1 = field outlets are always open 2 = head end farmers close the field outlets after the field is irrigated 3 = tail end farmers often face problems in irrigation as by the time water reaches to the tail end, flow will be limited 4 = Other (specify)
	B2. 9	How often you get irrigation in your padasekharam 1= always 2= once in two weeks 3 = once in a month 4= rarely
	B2. 10	Do you get sufficient irrigation for rice cultivation 1 = Yes for two rice seasons 2 = Yes for one rice season 3 = No
	B2. 11	Do you experience water shortage in any critical stage of rice growth? 1 = Yes 2 = No
	B2. 12	What are the major water-related challenges faced by your community? (Select all that apply) 1 = Insufficient water supply 2 = Unequal distribution 3 = Poor canal maintenance 4 = Conflicts among farmers 5 = Water theft/misuse 6 = High irrigation costs

		7 = Climate variability (drought/flooding)	
B2. 13	Do water conflicts occur among farmers in your community?	1 = yes 2 = No	
B2. 14	If yes, what are the main causes of these conflicts?	1 = Unequal access to water 2 = Unfair scheduling 3 = Illegal water withdrawals 4 = Poor communication 5 = Others (specify)	
B2. 15	How are water disputes resolved in your community?	1 = Informal discussions 2 = padasekhara samithi mediation 3 = Water User Association (WUA) mediation 4 = Panchayat mediation 5 = Legal action 6 = Any other (specify) 7 = No resolution mechanism	
B2. 16	Have you observed any changes in water availability over the past 5–10 years in your padasekharam?	1 = Increased water availability 2 = Decreased water availability 3 = No change	
B2. 17	What additional support do you need for better water management? (Select all that apply)	1= Better irrigation infrastructure 2 = Improved canal maintenance 3= Fairer water allocation 4= Training on water-saving practices 5= More financial support 6= Improved community coordination 7 = Any other (specify)	

Section C: Irrigation pumps and dewatering

QNo	Partciulars	Response			
C. 1	Does your padasekharam has irrigation/dewatering pumps?	1= Yes for irrigation 2= Yes for dewatering 3 = No irrigation pump			
C. 2	If padasekharam has pumps from C1, collect the details of the pump				
Sl.no	Type of pump (Choose from Code C2b)	Purpose (Code C2a)	Power (HP)	Discharge rate (Litres/second)	Fuel
	1 = Petty & Para Pump	1= Dewatering 2 = Pumping from lakes/rivers		Note: 1 m ³ =1000 litres	1= electric 2 = diesel

		2 = Submersible pump 3 = Propellor pump 4 = Turbine pump 5 = Centrifugal pump	3 = Well pumps 4 = Moving water from tail water pits 5 = Relifting or boosting water within system (pumps providing additional lift, pressure, or lateral movement)			
C. 3	If the pumps are used for dewatering from C1, how many pumps are used for dewatering?					
C. 4	If the pumps are used for dewatering from C1, how many days and hours are needed for dewatering?				____ day ____ hours	
C. 5	If the pumps are used for dewatering from C1, do you have sufficient number of pumps and power to dewater as per your padasekharam requirements?				1 = yes 2 = No	
C. 6	If No to C5, what additional requirement you have?					
C. 7	What is the total electricity consumption for dewatering?					
C. 8	Who shares the cost of operation?				1 = padasekhara Samithi 2 = Krsihibhavan 3 = Panchayat 4 = Irrigation department 5 = Any other (specify)	
C. 9	If cost of irrigation/dewatering is born by padasekhara samiti from C8, how are the irrigation expenses shared amongst the members?				1 = Expenses are shared equally among all members 2 = Expenses are shared based on land size 3 = Expenses are shared based on quantity of water consumed 4 = Others (please specify)	

Section D: Interaction with Krishi bhavan

QNo	Particulars	Response
D1	How often your padasekharam (leaders) interact with Agri officer?	1= at least once in a week 2= atleast once in two weeks 3 = atleast once in a month 4 = once in a while 5 = No interaction
D2	If you did have an interaction, what are the major aspects you engage with Krishibhavan? [multiple choice possible]	1= subsidy or government schemes 2= varieties and seeds 3 = irrigation 4 = Crop management (fertilizer, pesticides, weeds etc.) 5 = Training 6 = other (specify)
D3	Was there any training conducted for farmers in your padasekharam?	1 = yes 2 = No
D4	Do you have the mobile number of agricultural officer of your panchayat?	1 = yes 2 = No
D5	Do you have a WhatsApp or any other social media group for your padasekharam?	1 = yes 2 = No

D6	Is agricultural officer part of this WhatsApp group?	1 = yes 2 =No
D7	Are there any WhatsApp group for all padasekharams in your region?	1 = yes 2 =No
D8	When was the last time AO visited your padasekharam?	
D9	When was the last time you visted Krishi bhavan?	
D10	Are you happy with the advisory provided by AO?	1 = yes 2 =No
D11	Do you also contact KK/RARS/Agri University for any advice?	1 = yes 2 =No

Section E: GPS location of the 6 selected households