

Appendix 1: Questionnaire

I. General information of households

All members of household					
HH mem. ID	Relation to HH (1)	Marital status (2)	Age	Sex 1.Male, 2.Female	Year of schooling
1					
2					
3					
4					
5					

Code:

[1]: 1.HH head, 2.Husban/wife, 3.Son/Daughter, 4.Stepson, 5.Adopted son/daughter, 6.Father/mother, 7.Brother/sister, 8.Grandson/Granddaughter, 9.Niece/Nephew, 10.Son/daughter in law, 11.Brother/sister in law, 12.Father/mother in law, 13.Other relative, 14.Servant, 15.Other (please specified.....)

[2]: 1.Single, 2.Married, 3.Widow, 4.Divorce, 5.Seperate

II. Land use and cropping changes (Land access and land distribution)

Land use	Land size	Land property right? 1.Yes (Type.....) 0.No	How many times per year?	Previous land use?
Agricultural land	Total:.....ha			
Rice land	Plot 1.....ha Plot 2.....ha Plot 3.....ha Plot 4.....ha	Plot 1..... Plot 2..... Plot 3..... Plot 4.....	Plot 1..... Plot 2..... Plot 3..... Plot 4.....	Plot 1..... Plot 2..... Plot 3..... Plot 4.....
Have you changed any crops in each plot and when? (as example the change from floating rice to early season and receding rice)		<input type="checkbox"/> 1 yes <input type="checkbox"/> 2 no Specify the year.....		If yes, please specify kind of cropping system: Plot 1..... Plot 2..... Plot 3..... Plot 4.....
Why did you change them?		<input type="checkbox"/> 1 New short-term varieties introduced <input type="checkbox"/> 2 Enough irrigation system <input type="checkbox"/> 3 Decreasing water level <input type="checkbox"/> 4 Difficult to control old system <input type="checkbox"/> 5 Economic purpose		

.....								
-------	--	--	--	--	--	--	--	--

4.2 Early season rice: Month..... surface.....ha Year of growing:.....

Revenue								
N ⁰ Plot	Surface	Rice varieties	Duration	Productions (kg)	Sold (Kg)	Consumption (kg)	Price (USD)	Income (USD)
Cost of Inputs and labour								
Input type	Quant ity	Price (USD/ unit)	Labor		Hire	Total		
			Internal (M-day)	External (M-day)				
Seed								
Chemical fertiliser								
Pesticide								
Herbicide								
Sack								
Soil preparation								
Broadcast								
Weeding								
Fertilizing								
Rats controlling								
Harvesting								
Transportation								
Threshing								
Post-harvesting								
Other.....								

4.3 Receding rice: Month..... surface.....ha Year of growing:.....

Revenue								
N ⁰ Plot	Surface	Rice varieties	Duration	Productions (kg)	Sold (Kg)	Consumption (kg)	Price (USD)	Income (USD)
Cost of Inputs and labour								
Input type	Quantity	Price (USD/ unit)	Labor		Hire	Total		
			Internal (M-day)	External (M-day)				
Seed Rate								
Chemical fertiliser								

Pesticide						
Herbicide						
Sack						
Soil preparation						
Broadcast						
Weeding						
Fertilizing						
Rats controlling						
Harvesting						
Transportation						
Threshing						
Post-harvesting						
Rental land						
Other.....						

4.4 Dry Season rice Month..... surface.....ha Year of growing:.....

Revenue								
No	Surface	Rice varieties	Duration	Productions (kg)	Sold (Kg)	Consumption (kg)	Price (USD)	Income (USD)
Plot								
Cost of Inputs and labour								
Input type	Quantity	Price (USD/unit)	Labour		Hire	Total		
			Internal (M-day)	External (M-day)				
Seed								
Chemical fertiliser								
Pesticide								
Herbicide								
Sack								
Soil preparation								
Broadcast								
Weeding								
Fertilizing								
Rats controlling								
Harvesting								
Transportation								
Threshing								
Post-harvesting								
Other.....								
.....								

VI. Awareness and perception of ES

1. To what extent, are you aware the Ecosystem services from Tonle Sap Lake contributed in your agriculture (rice)? (1= Yes/ 2= No)

Categories of ES	Scales of awareness (1= strongly agree, 2= Agree, 3= Somehow, 4= Disagree)
1.1 Fresh water (flooding)	
1.2 Soil fertility	
1.3 Wild animals (snake, other animals)	
1.4 Fishes	
1.5 Flooded forest	

2. To what extent, do you think these Ecosystem services from Tonle Sap Lake are important to your agriculture (rice)? (1= yes, 2= no).....

Categories of ES	Scales of perceptions (1= Very important, 2= Important, 3= less important, 4= Not important)
2.1 Fresh water (flooding)	
2.2 Soil fertility	
2.3 Wild animals (snake, other animals)	
2.4 Fish	
2.5 Flooded forest	

3. To what extent, do you agree these ES in Tonle Sap are being changed comparing to previous time (before 2008)?

Categories of ES	Scales of perceptions (1= Strongly change, 2= Somehow, 3= The same, 4= Don't know)	(A) Why?
4.1 Fresh water (flooding)		
4.2 Soil fertility		
4.3 Wild animals (snake, other animals)		
4.4 Fish		
4.5 Flooded forest		
4.6 Climate		

Appendix 2: Group discussion



Appendix 3: Farmers interview



Appendix 4: In depth interview and field observation



Appendix 5: Traditional rice field



Appendix 6: Chemical fertilisers applied by farmer in short-term rice

