

Table 1. Socioeconomic characteristics of the rice, shrimp and salt farmers in the two coastal study areas

Characteristics (unit of measurement)	Rice farmer (N=109)		Shrimp farmer (N=107)		Salt farmer (N=64)		F-value
	Mean	SD	Mean	SD	Mean	SD	
Age (yrs)	47.44	8.82	46.70	8.56	47.73	8.40	0.35NS
Education (schooling yrs)	6.70	5.42	8.43	4.51	3.03	3.04	27.44**
Total farm size (bigha ¹)	7.97	5.41	28.86	27.68	7.63	5.54	46.76**
Land ownership (bigha)	4.61	4.51	13.00	18.85	2.02	2.26	20.82**
Farming experience (yrs)	23.02	8.31	22.23	7.90	25.58	7.14	3.73*
Monthly income (BDT)	11432	3856.06	19072	3224.56	12192	3695.63	139.95**

** = significant at 5% level of significance, NS = not significant

¹ 1 ha= 7.4 bigha

Table 2. Context of salinity among the different types of farmers in the two coastal study areas

Issues of the salinity problem	% of the respondents			
	Rice farmer (N=109)	Shrimp farmer (N=107)	Salt farmer (N=64)	Overall (N=280)
Trend of salinity over the last 20 years				
Salinity increased	87.2	35.5	43.8	57.5
Salinity decreased	9.2	52.3	51.6	35.4
No changes in salinity	3.7	12.1	4.7	7.1
Chi-square = 68.51**				
Current salinity level				
High	89.9	46.7	60.9	66.8
Low	10.1	53.3	39.1	33.2
Chi-square = 46.66**				
Salinity level 20 years ago				
High	15.6	64.5	46.9	41.1
Low	84.4	35.5	53.1	58.6
Chi-square = 54.20**				
Drivers of increased salinity				
Human interventions (e.g. shrimp farming, salt farming, faulty sluice gate)	62.1	26.8	30.8	46.9
Natural events (e.g. cyclones, coastal flood, siltation of river, less rainfall)	27.4	39.0	10.2	26.2
Human interventions and natural events	10.5	34.2	59.0	26.9
Chi-square = 41.98**				

** indicates significant at 5% level of significance

Table 3. Farmers' perceived causes of decline in salinity.

Farmer type (n)	% of the respondents	
	Rainfall increased as compared to the previous decades	Less risk of inundation of saline water due to siltation of rivers and canals
Rice farmers (10)	70.0	30.0
Shrimp farmers (56)	30.4	69.6
Salt farmers (28)	67.9	32.1

Table 4. Sources of information and farming advice of the different types of farmers.

Farmer type (n)	% of the respondents				
	Agriculture office and local sub-assistant agriculture officer	Neighbouring farmers	Neighbouring farmers and local input dealers	Neighbouring farmers and local fisheries office	Neighbouring farmers and government personnel
Rice farmers (109)	50.5	22.9	26.6	0	0
Shrimp farmers (107)	0	51.4	3.7	44.9	0
Salt farmers (64)	0	92.2	0	0	7.8

Table 5. Impacts of high salinity on farming enterprises.

Farmer types (n)	(% of farmer interviewees)						
	Rice plants dry up, unfilled grain, lower yield, income reduced	Damaged soil fertility, lower yield, less income	Crop cultivation becomes difficult, less yield, income reduced	Growth of fish is good, higher yield, more income	Movement of fish in the pond is noticeable, higher yield, more income	Density of water increases, higher yield	Higher salt yield
Rice farmers (109)	42.2	27.5	30.3	0.0	0.0	0.0	0.0
Shrimp farmers (107)	0.0	0.0	0.0	30.8	69.2	0.0	0.0
Salt farmers (64)	0.0	0.0	0.0	0.0	0.0	54.7	45.3