

Appendix A
Interview Question Guide

Interviewed: _____ Date&time _____ HH No. _____

1. How many people are there in your household? ___ adults ___ children _____. How many people earn wage income in your household, and how do they earn that income? Please list for me the people who earn wages and tell me what kind of work they do. Are there any unemployed adults in your household now?

Name	Age	Sex	Educ	Trabaho	Income	

2. Who heads this household? _____ married couple ___ female head alone ___ male head alone _____
 4. What is the total monthly or annual income of your household? _____
 5. Please describe your house for me. How many rooms? Do you have electricity in the house? Do you have running water?
 6. Other properties as land? Car? Other houses?

# rooms	
water	
electricity	
appliances	
toilet	

Open-ended Questions

1. What has been the impact of aquaculture (commercial production of prawn for export) on your family?
2. How has your family’s small-scale fishing changed since aquaculture developed in this area?
3. Are you still able to fish along the coast? Do you still catch as many fish as you once did?
4. Has aquaculture increased employment opportunities for any members of your household?
5. Is your household better off now, or do you think your situation has gotten worse?
6. Has aquaculture made it easier for your family to acquire the food you need?
7. What non-fishing activities do men now engage in to meet family survival needs? For example, do you grow a garden, gather wild foods or hunt, collect items from public garbage dumps, sell crafts or services in the local market?
8. What non-fishing activities do women now engage in to meet family survival needs? For example, do you grow a garden, gather wild foods or hunt, collect items from public garbage dumps, sell crafts or services in the local market?
9. What activities do your children engage in to help meet family survival needs? What kinds of work do boys do? What kinds of work do girls do?
10. Has the workload of the adult males in your family increased in recent years?
11. Has the workload of adult women increased in recent years?
- 12a. Address this question only to female heads of household: Is it harder now for a woman alone to accumulate the survival needs of her family? Or is it about the same for you that it was 5 years ago?
- 12b. Address this question only to married spouses: Is it harder now for your family to accumulate its survival needs? Or is it about the same for you that it was 5 years ago?
13. What has happened to the environmental resources? How does this change affect your community?
14. Are there specific government policies that you think have been negative for your community?
15. What are the current problems of households that engaged in small-scale fishing in the past?
16. What kinds of non-fishing activities do fishing households engage in now to generate more income?
17. How have women in your community been affected by aquaculture?

Appendix B

Characteristics of Lapinig Interviewed Households

Hshld .No.	Hshld Head	Total No. in Hshld	No. Adults in Hshld.	No. Chldrn in Hshld.	Age Hsbnd	Age Wife	Ages Children	Education Husband *	Educ. Wife *	Education Children*	Ave. Daily Per capita US\$
1	M	5	2	3						elem	-
2	M	5	2	3	60	51	10,6,4	elem	elem	elem	0.44
3	M	3	3	0	54	51	25	gr 3	gr 1	HS	-
4	M	6	2	4	29	34 pregn	12,7,5,2	elem	gr 4	elem	0.22
5	M	6	2	4	56	50	<15	elem	elem	elem	0.30
6	M	5	2	3	47	44	16,13,8	HS	coll level	HS, elem	0.85
7	M	5	2	4	34	32	10,8,5,3	elem	HS	elem	0.47
8	M	5	2	3	45	50	<18	elem	grade 3	1 HS-stopped 2 in elem	0.25

* US\$1=P55.00 (average for November 2004 to June 1, 2005) * Elementary education = 6 years; high school = 4 years

Hshld No..	Occupation. Husband	Occupatio n. Wife	No. Rooms in house	House Type	Water*	Electricity Y or N	Appliances	Toilet
1	buy & sell shells		2	nipa	L2	N	none	none
2	fishpond laborer	nipa thatching	1	wood & nipa	L2	Y	TV, radio	none
3	farming	housewife	2	wood & nipa	L2	Y	ref, TV	inside house
4	fishing	nipa thatching	1	nipa	L1	N	none	outside house
5	fishing	nipa thatching	2	wood & nipa	L2	N	radio	outside house
6	fishpond operator		2	wood & nipa	L1	Y	TV, sing-along, motorized boat	none
7	fishing	nipa thatching	2	wood & nipa	L2	Y	TV	none
8	fishing	nipa thatching	2	wood & nipa	L2	N		none

*Water: L1- public reservoir of untreated spring water; L2 - several faucets for access to untreated spring water by a cluster of households; L3- untreated spring water piped into individual house

Hshld No.	Type of Fishing	Husband's Non-fishing Activities	Wife's Non-fishing Activities	Child Work	Harder to survive now?	Workload increased-husband?	Workload increased-wife?
1	Not fishing anymore.!	clean and sell shells		-1 son working in Cagayan market to go to school; 3 help in shells work	Yes	Yes	Yes
2	fishpond laborer	none	nipa thatching manasa, gardening	10-yo son labor in fishpond for P20/hr	N (moved out of fishpond)	No	No
3	Not fishing anymore	farming in other area		1 son working Manila (domestic)	Yes	-	-
4	"pakoryente"	none	nipa thatching, livestock	-3 sons in uncle w/o pay for subsistence	Same hard life!	Yes	Yes
5	pukot	nipa thatching	nipa thatching	none	Yes	Yes	Yes
6	fishpond	none	nipa thatching, livestock	boy helps in fishpond, girl in thatching nipa	Yes	Yes	Yes
7	laya	none	nipa thatching	none	Yes	Yes	-
8	Pukot		nipa thatching	boy helps fishing, girl helps nipa thatching	Yes	Yes	Yes

Appendix C

Characteristics of San Roque Interviewed Households

Hshld No.	Hshld Head	Total No. in Hshld	No. Adults in Hshld	No. Children in Hshld	Age Hsbnd	Age Wife	Ages Children	Education Husband *	Education Wife *	Education Children *	Ave. Daily Per capita US\$
1	M	3	2	1	60+	60+	16	HS	gr 6	coll	1.00
2	M	12	5	7	48	47	14,12,8, four under 6yo	HS	college	college, HS, elem	0.50
3	M	2	2	(1 died)	28	17	(died <1yo)	HS	elem	-	1.18
4	M	11	7	4	69	67	15, three <12yo	gr 4	gr 4	coll, HS, elem	-
5	F - w	4	3	1	(dead)	50	7	elem	elem	HS	0.20
6	M	9	4	5	45	40	16, 14, 12, 7, 2	elem	1 st Year HS	3 rd HS, elem	0.81
7	M	4	2	2	28	26	2 <6yo	HS	coll		-

US\$1=P55.00 (average for November 2004 to June 1, 2005) * Elementary education = 6 years; high school = 4 years

Hshld No..	Occupation. Husband	Occupation wife	No. Rooms in house	House Type	Water	Electricity Y or N	Appliances *	Toilet
1	guso planter	farming	4	concrete	L3	Y	TV	inside
2	guso planter	secretarial job	3	wood	L2	Y	TV, ref, radio-cassette, washing machine, gas range	inside
3	fisher	none	1	nipa, stilt house	L1	N	none,	none
4	guso planter	fish vendor	3	wood	L2	Y		inside
5	N.A.	guso planter	1	rent, room	L2	Y	TV	none
6	guso planter	housewife	3	wood	L3	Y	TV, VCR, gas range, MB, washing machine	inside
7	guso planter	housewife	2	rent, wood	L2	Y	TV	none

*Water: L1- public reservoir of untreated spring water; L2 - several faucets for access to untreated spring water by a cluster of households; L3- untreated spring water piped into individual house

Hshld No.	Type of Fishing	Husband's Non-fishing Activities	Wife's Non-fishing Activities	Child Work	Harder to survive now?	Workload increased-husband?	Workload increased-wife?
1	Not anymore!	seaweed	farm	none	same! Difficult life.	Yes	-
2	Not anymore!	seaweed	secretarial job	1 salesgirl 1 casual govt. employee	Yes	Yes	Yes
3	hook & line	none	none	N.A.	Same hard life	same!	-
4	pukot for food	seaweed	fish vendor	-	same	same	same
5	none	N.A.	seaweed	daughter- domestic in city	Yes	N.A.	no
6	Not anymore!	seaweed	none	none	Yes	Yes	-
7	none	seaweed	none	none	Yes	Yes	Yes

Appendix D
Characteristics of Silanga Interviewed Households

Hshld No.	Hshld Head	Total No. in Hshld	No. Adults in Hshld	No. Childrn in Hshld	Age Hsbnd	Age Wife	Ages Children	Educ. Hsbnd. *	Educ. Wife *	Educ. Chldrn *	Ave. Daily Per capita \$US
1	M	4	4	-	45	42	0	col level	coll level	coll, HS	2.63
2	M	8	3	5	40	35	17,14,12,7,4	elem	elem	3 HS stopped 1HS, elem	0.20
3	M	5	2	3	42	38	11,6,1mo	coll level	coll grad	elem	1.8
4	M	6	3	3	32	32	11,8,7	grade 5	grade 4	elem	0.19
5	M	4	3	1	71	71	14	HS	elem	HS,HS	0.30
6	M	4	4	-	56	50	0	HS grad	HS grad	all HS grad, 1 coll	0.20
7	M	4	3	1	63	62	8	grade 5	grade 6	2 coll grads, 1 col level	0.33
8	M	9	4	5	62	64	8,5,5,3,2	elem	elem	1 coll, 6 elem, 1 HS	0.11
9	M	9	6	3	35	32	12,10,1	elem	elem	HS	0.94
10	M	6	3	3	52	56	16,15,14	elem	elem	HS all	0.23
11	F (w)	6	6	0	dead	46	none	dead	HS	HS all	0.15

US\$1=P55.00 (average for November 2004 to June 1, 2005) * Elementary education = 6 years; high school = 4 years

Hshld No.	Occupation. Husband	Occupation. Wife	No. Rooms in house	House Type **	Water	Electricity	Appliances	Toilet
1	fishpond operator		4	concrete	L3	Yes	TV, ref, gas range, VCR	outside house
2	fishpond laborer	assist husband	2	semi concrete/GI roof (fishpond house)	L2	Yes	radio	outside house
3	fishpond operator		2	wood,	L2	Yes	ref, TV	outside house
4	fishpond laborer	oyster	2	nipa	L2	No	none	no toilet
5	fisher	fisher, oyster	3	semi concrete /GI roof	L3	Yes	TV	inside house
6	fisher	fisher, oyster	3	semi-concrete/GI roof	L2	Yes	TV	inside house
7	fisher	fisher, oyster	3	semi-concrete/ GI roof/	L3	Yes	TV, radio-cassette	outside
8	fisher	sick & deaf	3	nipa & wood	L2	No	none	no toilet
9	fishpond operator		3	semi-concrete/GI roof	L3	Yes	TV, ref, radio-cstte	inside
10	fisher	fishery, oyster	2	nipa&wood	L2	No	none	outside
11	-dead-	oyster, seaweed	2	nipa & wood	L2	Yes	TV, radio	outside

*Water: L1- public reservoir of untreated spring water; L2 - several faucets for access to untreated spring water by a cluster of households; L3- untreated spring water piped into individual house ** A semi-concrete house usually is built of concrete and wood. A GI roof is galvanized iron.

Hshld No.	Type of Fishing	Husband's Non-fishing Activities	Wife's Non-fishing Activities	Child Work	Harder to survive now?	Workload increased—husband?	Workload increased—wife?
1	fishpond	none	garden, livestock	help fishpond	Same	no	no
2	fishpond	none	garden, livestock	firewood, fetch water	Same	Yes	Yes
3	fishpond	none	none	none	Same	Yes	no
4	hook&line, agihis gathering	none	laundry, livestock	none	Yes	Yes! Agihis are now far away	Yes
5	bungsod & pukot	none	none	help net repair	Yes	Yes	Yes
6	bungsod	none	gardening, livestock	2 girls as domestics	Yes	Yes	Yes
7	bungsod & pukot	none	gardening	teacher	Yes	Yes	Yes
8	pukot	tenant-farming	none	Daughter in law gathers oysters; 2 children working in Manila	Yes	Yes	Yes
9	fishpond	gardening	oyster, gardening	oyster	Yes	Yes	Yes
10	pukot	none	bldg caretaker, sell oysters		Same hard life!	Yes	Yes
11	pukot	(dead)	oyster, seaweed garden	domestic, fishing	Yes	(dead)	Yes

Appendix E

Glossary of Dialectical Terms

<i>agihis</i>	small shells gathered from Panguil Bay used to feed prawns in the fishpond
<i>amahong</i>	brown mussels
<i>ayaay</i>	low tide season, usually runs in two weeks time a month.
<i>bakhaw</i>	a local specie of hard trees in mangroves
<i>baha</i>	flood
<i>bangus</i>	milkfish, a kind of fish in the fishponds
<i>barangay</i>	the smallest political unit in the Philippines; an equivalent of a village
<i>bintol</i>	catch crabs
<i>bobo</i>	a large cylindrical net placed at the end part of the <i>bungsod</i> to contain the trapped fishes.
<i>bodega</i>	a warehouse
<i>bodegero</i>	a male worker on a warehouse
<i>bolo</i>	usually 6 inches to 1 foot-long thick and dull knife made of cast iron
<i>bulanbulan</i>	a kind of fish
<i>bungsod</i>	fish corral; a stationary fishing gear popular in Panguil Bay; an enclosure and barrier contraption made of bamboo stakes, nets and other materials devised to intercept and ultimately capture fish.
<i>burnay</i>	a local edible shells, a bivalve
<i>butok</i>	a bundle of <i>nipa</i> leaves
<i>camote</i>	local sweet yam

<i>cardaba</i>	a type of banana usually cooked when eaten
<i>carenderia</i>	a local eating place where the costumers choose among the displayed cooked food.
<i>dalap</i>	measles
<i>family operator</i>	a family who manages fishpond and takes charge of its production
<i>gabon</i>	wild herb used for treatment of cough
<i>gisaw</i>	small fishes
<i>guba</i>	destroyed or dilapidated
<i>guso</i>	seaweeds
<i>guso-an</i>	seaweed garden
<i>haluan</i>	fish found in ricefields;
<i>hebi</i>	small-sized shrimps sun-dried
<i>huklas</i>	a period where the <i>bungsod</i> , fish coral, is taken out of the sea for regular maintenance repair and cleaning.
<i>Kabakhawan</i>	a mangrove area where <i>bakhaw</i> , a tree specie, abounds
<i>kalusayan</i>	sea grass area
<i>karomata</i>	wooden cart drawn by horse or carabao (water buffalo)
<i>kawad-on</i>	literally means “nothingness”; not having the capacity to meet basic survival needs;
<i>kitong</i>	a local variety of an expensive fish in Panguil Bay and is now rarely caught by fishers
<i>kugi</i>	industriousness
<i>kutay</i>	a line of seaweeds usually 100meters long made of nylon
<i>labada</i>	laundry

<i>labandera</i>	a woman who does laundry
<i>lapu-lapu</i>	a local variety of an expensive fish in Panguil Bay and is now rarely caught by fishers.
<i>lawod</i>	ocean or sea
<i>laya</i>	cast net; a fishing gear
<i>malungay</i>	green leafy vegetables
<i>maloro</i>	a hardwood tree specie in the mangrove
<i>manasa</i>	to harvest nipa leaves in the mangroves by cutting the leaves from the trunk
<i>manibit</i>	another term for thatching nipa
<i>manluti</i>	to work on the vine that is used in thatching nipa
<i>motorela</i>	a cab is attached to a motorcycle and is used for public transport
<i>nipa</i>	local variety of palm in the mangroves
<i>paali</i>	literally means to stand in the way; a way of harvesting <i>guso</i>
<i>Pagatpat</i>	a local specie of hard wood in the mangroves
<i>pahubas</i>	literally means to empty or to dry up; a method in harvesting prawn where water is drained through the vents and prawns that come with the water are drained or sifted through nets position in the vent.
<i>pakoryente</i>	literally means to electricute; a type of fishing gear using battery from vehicles and electricute the water to catch the fish
<i>palawran</i>	the thin bamboo stick used in nipa thatching
<i>palay</i>	rice
<i>pan-id</i>	prawn feeder
<i>paningkamot</i>	hard work or hard efforts
<i>pawod</i>	thatched <i>nipa</i>

<i>pedicab</i>	also called a <i>Sikad</i> ; a cab is attached to a bike and is used for public transportation
<i>Piapi</i>	local mangrove specie of trees
<i>pukot</i>	a fishing gear where net is cast using a boat a gill net
<i>punaw</i>	a kind of shell
<i>purok</i>	an aggregation of households in a barangay
<i>sabot</i>	a large light bowl to scoop <i>agihis</i> in the ocean floor
<i>saging ginanggang</i>	barbecued banana
<i>sibit</i>	the thin bamboo stick used in the thatched <i>nipa</i>
<i>sigot</i>	to tie a bunch of seaweed for seedlings and attach to the <i>kutay</i>
<i>sikad</i>	see pedicab
<i>sisi</i>	oysters
<i>sudsud</i>	trawl; a fishing gear
<i>sudsud makina</i>	mechanized trawl; a fishing gear
<i>suki</i>	a preferred buyer/seller of a commodity, usually established after a long period of business relationship.
<i>tabigi</i>	a tree specie found in mangrove
<i>tagik</i>	the vine that is used in thatching <i>nipa</i>
<i>tilapia</i>	a specie of fish which thrive in fishpond;
<i>ukay-ukay</i>	relief goods, like clothes, from international donors that are sold cheap on the (black) market.
<i>uyabang</i>	small shrimps