

Appendices

Appendix 1 List of mangrove species found on Olango Island

Species	Local name	Poo ²	Talima ²	Tungasan ²	Sabang ²	San Vincente ²	San Isidro ¹	Suba Basbas ¹	Sta Rosa ¹	Lumayag Pt. ¹	Remarks/usage
<i>Acanthus ebracteatus</i>	n. d.					2					n. d.
<i>Acanthus ilicifolius</i>	n. d.										n. d.
<i>Aegiceras corniculatum</i>	Sagin-saging				2						
<i>Aegiceras floridum</i>	n. d.									1	
<i>Avicennia alba</i>	Piape laki	3			1		1	1		1	firewood
<i>Avicennia lanata</i>	Piape laki				2				1		firewood
<i>Avicennia marina</i>	Piape baye	2			2	2		1	1	1	firewood
<i>Avicennia officialis</i>	Piape laki	1			3		1	1		1	firewood
<i>Bamngtonia asiatica</i>	Bito-bitoon		2								n. d.
<i>Bruguiera cylindrica</i>	n. d.									1	
<i>Bruguiera gymnorhiza</i>	n. d.	1								1	
<i>Ceriops decandra</i>	n. d.	1			1					1	
<i>Ceriops tagal</i>	n. d.	1					1		1	1	
<i>Dolichandrone spathecea</i>	Tui		2		1						n. d.
<i>Excoecana agallocha</i>	Alipata; Buta-buta	1	2	2	3		1	1	1	1	n. d.
<i>Lumnitzera littorea</i>	Mayoro	3	2		1		1	1		1	n. d.
<i>Lumnitzera racemosa</i>	n. d.	1					1	1	1	1	
<i>Osbornia octodonta</i>	n. d.	1							1	1	
<i>Pandanus sp.</i>	Pandan										n. d.
<i>Pempis acidula</i>	Bantigi		2	2	2						n. d.
<i>Pongamia pinnata</i>	n. d.		2		2	2					n. d.

1 Magsalay 1989a; 2 SUMML 1997; nd – no data

(Appendix 1 continued)

Species	Local name	Poo ²	Talima ²	Tungasan ²	Sabang ²	San Vincente ²	San Isidro ¹	Suba Basbas ¹	Sta Rosa ¹	Lumayag Pt. ¹	Remarks/usage
<i>Prosopis vidaliana</i>	n. d.	2									n. d.
<i>Rhizophora apiculata</i>	Bakhaw laki	1	2		1		1	1	1	1	reforestation & decor
<i>Rhizophora mucronata</i>	Bakhaw baye	3	2	2	3	2	1	1	1	1	reforestation & decor
<i>Rhizophora stylosa</i>	Bakhaw tigre		2	2	1		1	1	1		reforestation & decor
<i>Scaevola frutescens</i>	Aroma		2	2	2						n. d.
<i>Scyphiphora hydrophyllacea</i>	n. d.	1									
<i>Sesuvium portulacastrum</i>	n. d.	1							1	1	
<i>Sonneratia alba</i>	Pagatpat; pedada	2	2		2						fencing and decor
<i>Sonneratia caseolaris</i>	n. d.	1			1		1	1	1	1	
<i>Terminalia catappa</i>	n. d.									1	
<i>Thespesia populnea</i>	n. d.									1	
<i>Xylocarpus moluccensis</i>	n. d.	1			1				1	1	

1 Magsalay 1989a; 2 SUMIL 1997; nd – no data

Appendix 2 Number of seaweed and seagrass species per genus on Olango Island (SUML 1997)

Genus	Poo	Talima	Tungasan	Sabang	San Vicente
Algae					
<i>Rhodophyta</i>					
<i>Actinotrichia</i>	1	1	1	1	1
<i>Galaxaura</i>	2			1	1
<i>Gelidiella</i>	1	1	1	1	1
<i>Gelidium</i>				1	
<i>Pterocladia</i>		1			
<i>Amphiroa</i>	2	2		1	1
<i>Jania</i>	2	1	1	1	
<i>Mastophora</i>		1		1	1
<i>Pseudolithophyllum</i>			1		
<i>Gracilaria</i>	2	2	3	2	2
<i>Gelidiopsis</i>	1		1		
<i>Hypnea</i>	1		1	2	1
<i>Champia</i>	1	1	1	1	
<i>Acanthophora</i>	1		1	2	
<i>Amansia</i>	1	1		1	1
<i>Bostrychia</i>	1	1	1		
<i>Laurencia</i>	2	2	1	1	2
<i>Phaeophyta</i>					
<i>Colpomenia</i>	1		1		
<i>Hydroclathrus</i>	1	1		1	1
<i>Dictyota</i>	3	3		1	1
<i>Padina</i>	2	2	1	1	1
<i>Lobophora</i>	1	1	1	1	
<i>Sargassum</i>	2	2	2	2	3
<i>Turbinaria</i>	3	3	2	2	2
<i>Chlorophyta</i>					
<i>Monostroma</i>	1	1			
<i>Ulva</i>	2	2	2	1	1
<i>Chaetomorpha</i>	1	1	1	1	1
<i>Cladophora</i>	1	1			
<i>Anadyomene</i>	1	1	1	1	
<i>Microdictyon</i>				1	
<i>Boergesenia</i>		1	1	1	
<i>Boodlea</i>	1	1	1	1	
<i>Dictyosphaerea</i>	1	1	1	1	1
<i>Valonia</i>	1	1			
<i>Ventricaria</i>	1			1	
<i>Caulerpa</i>	2	1	2	1	2

(Appendix 2 continued)

Genus	Poo	Talima	Tungasan	Sabang	San Vicente
<i>Codium</i>	1			1	1
<i>Halimeda</i>	1	2	1	1	2
<i>Avrainvillea</i>	1				
<i>Udotea</i>	1	1			
<i>Bornetella</i>	1	2		2	1
<i>Halicoryne</i>		1			1
TOTAL	48	43	30	37	29
Seagrasses					
<i>Cymodocea</i>	2	1			
<i>Halodule</i>	2	1	1	2	2
<i>Syringodium</i>	1	1	1		1
<i>Enhalus</i>	1	1	1	1	
<i>Halophila</i>	1		1	1	1
<i>Thalassia</i>	1	1	1	1	1
TOTAL	8	5	5	5	5

Appendix 3 Terrestrial plants used as fuel wood on Olango Island (from Remedio & Olofson 1998)

Visayan Term	Scientific name	English name
Biatilis, ipil-ipil	<i>Leucaena leucocephala</i>	Leadwood
Bakhaw, tungki	<i>Rhizophora spp.</i>	Mangrove
Kamoteng kahoy & tungdan	<i>Manihot utilissima</i>	Cassava stems, dried cassava
Puno-an sa lubi	<i>Cocos nucifera</i>	Coconut palm trunks
Anasil	<i>Unidentified</i>	–
Bantigi	<i>Pemphis acidula</i>	None
Madre de cacao	<i>Gliricidia sepium</i>	None
Kanding-kanding	<i>Lantana camara</i>	None
Bayabas	<i>Psidium guajava</i>	Guava
Bungaw	<i>Astrocalyx calycina</i> *	None
O-on	<i>Ixora</i> *	None
Gapas-gapas	<i>Camptostemon philippinense</i> *	Mangrove
An-an	<i>Buchanania arborescens</i> *	None
Hamomi-aw	<i>Unidentified</i>	–
Tugas	<i>Vitex parviflora</i>	Molave
Kamunggay	<i>Moringa oleifera</i>	Horse radish tree

* Identification uncertain

Appendix 4 Number of coral species per genus at three sampling sites on Olango Island (SUML 1997)

Genus	Poo	Talima	Tungasan
Reef building corals			
<i>Acropora</i>	2	5	5
<i>Astreopora</i>		1	
<i>Montipora</i>	1	1	1
<i>Coeloseris</i>	1		
<i>Gardineroseris</i>			
<i>Leptoseris</i>	1		
<i>Pavona</i>		1	2
<i>Pachyseris</i>	1	1	1
<i>Euphyllia</i>	1	1	1
<i>Physogyra</i>			1
<i>Plerogyra</i>	1		
<i>Tubastrea</i>	1	1	
<i>Turbinaria</i>	2	1	
<i>Cyphastrea</i>	2	2	2
<i>Diploastrea</i>	1		1
<i>Echinopora</i>	1	1	1
<i>Favia</i>	3	3	2
<i>Favites</i>	2	1	2
<i>Goniastrea</i>	2	2	1
<i>Leptastrea</i>	1	1	
<i>Leptoria</i>			
<i>Montastrea</i>	1	2	1
<i>Platygyra</i>	3	1	2
<i>Cycloseris</i>			
<i>Diaseris</i>			
<i>Fungia</i>	1	1	4
<i>Halomitra</i>			
<i>Herpolitha</i>	1		1
<i>Sandalolitha</i>	1		
<i>Hydnophora</i>	2	1	1
<i>Merulina</i>	1		
<i>Lobophylla</i>	1	1	1
<i>Scolymia</i>		1	
<i>Symphyllia</i>	1	1	
<i>Galaxea</i>	1	1	1
<i>Echinophyllia</i>	1	1	
<i>Mycedium</i>	1	1	1
<i>Oxypora</i>	1		
<i>Pectinia</i>	2		1

(Appendix 4 continued)

Genus	Poo	Talima	Tungasan
<i>Pocillopora</i>	1	2	1
<i>Seriatopora</i>	1		1
<i>Stylophora</i>	1	1	
<i>Goniopora</i>			1
<i>Porites</i>	3	1	1
<i>Psammocora</i>	1	1	3
<i>Trachyphyllia</i>			
TOTAL	48	38	40
Non-reef building corals			
<i>Heliophora</i>	1	1	
<i>Millepora</i>	1	1	1
TOTAL	2	2	1
Soft Corals			
<i>Nephthea</i>		1	
<i>Sarcophyton</i>		1	
<i>Sinularia</i>	1	1	1
<i>Xenia</i>			1
TOTAL	1	3	2

Appendix 5 The number of fish species per family identified in some selected sites in Olango Island (SUMML 1997)

Family	Tungasan	San Vicente	Talima
Acanthuridae	3	3	4
Apogonidae	2		2
Balistidae	1	3	2
Blenniidae		2	1
Caesionidae		1	
Centriscidae		1	
Chaetodontidae		2	1
Cirrhitidae	1	1	1
Holocentridae			
Labridae	12	15	16
Lethrinidae			1
Lutjanidae		2	1
Mullidae	2	2	2
Nemipteridae		1	1
Pinguipedidae	1	1	2
Pomacanthidae	3	1	1
Pomacentridae	9	15	14
Scaridae	3	5	4
Scorpaenidae		1	1
Serranidae			1
Siganidae	1	1	
Syndontidae	1		1
Tetraodontidae	2	2	2
TOTAL	41	59	58

Appendix 6 Population density and wet biomass of zoobenthic organisms collected in the seagrass bed south of Olango Island (SNS & WBS 1996)

Species	Number of individuals	Number of core samples with individuals	Total area of core samples (m ²)	Estimated density	Wet biomass (g)
Slugs	12	4	0.2500	48	3.25
Sponges	22	17	1.0625	21	471.5
Polychaetes	8	8	0.5000	16	0.56
Hermit crabs	14	10	0.6250	22	3.32
Isopods	2	2	0.1250	16	0.17
Crayfish	1	1	0.2500	16	0.09
Annelids	7	2	2.0625	56	0.32
<i>Holothuria</i> sp.	4	4	0.1250	16	1.11
<i>Ophiocoma</i> sp.	98	33	0.2500	47	180.91
<i>Echinotrix</i> sp.	2	2	2.0625	16	26.80
<i>Littorina</i> sp.	6	5	0.1250	19	0.88
<i>Phacoides</i> sp.	4	4	0.3125	16	0.50
<i>Strombus</i> sp.	1	2	0.2500	16	0.65
<i>Tectus</i> sp.	1	2	0.0625	16	0.25
<i>Cynatium</i> sp.	1	2	0.0625	16	0.10
<i>Terebralia</i> sp.	1	2	0.0625	16	0.05
<i>Nerita</i> sp.	31	10	0.6250	50	6.13
<i>Nassarius</i> sp.	3	2	0.1250	24	8.10
<i>Niota</i> sp.	2	1	0.0625	32	2.18
<i>Cerithium</i> sp.	4	2	0.1250	32	4.10

Appendix 7 Echinoderms, crustaceans, and molluscs recorded in San Vicente and Talima on Olango Island (from USC-MBS 1980)

Echinoderms	Crustaceans	Molluscs			
<i>Holothuria</i> sp.	<i>Squilla</i> sp.	<i>Terebralia sulcata</i>	<i>Lambis millepeda</i>	<i>Bursa bufo</i>	<i>Rapana</i> sp.
<i>Synapta</i> sp.	<i>Thalamita</i> sp.	<i>Terebralia</i> sp.	<i>Lambis lambis</i>	<i>Bursa</i> sp. 1	<i>Buccinum</i> sp.
<i>Holothuria atra</i>	<i>Uca</i> sp.	<i>Terebralia telescopi</i>	<i>Strombus aurisdiane</i>	<i>Bursa</i> sp. 2	<i>Trochus niloticus</i>
<i>Bohadschia</i> sp.	<i>Portunus pelagicus</i>	<i>Dolabella</i> sp.	<i>Strombus lentiginosus</i>	<i>Conus literatus</i>	<i>Trochus pyramis</i>
<i>Thelenota ananae</i>	<i>Pagurus</i> sp.	<i>Littorina scabra</i>	<i>Strombus luhuanus</i>	<i>Conus mustelinus</i>	<i>Angaria delphinula</i>
<i>Stichopus</i> sp.	<i>Periclemnes</i> sp.	<i>Littorina fasciolaria</i>	<i>Strombus sinuatus</i>	<i>Conus chaldeus</i>	<i>Astrea</i> sp.
<i>Diadema setosum</i>	<i>Coenobita</i> sp.	<i>Littorina</i> sp.	<i>Strombus urceus</i>	<i>Conus marmoreus</i>	<i>Tubo marmoratus</i>
<i>Echinotrix calamaria</i>	<i>Calappa</i> sp.	<i>Cerithium panlevi</i>	<i>Strombus labiatus labiatus</i>	<i>Conus planorbis</i>	<i>Turbo petholatus</i>
<i>Toxopneustes</i> sp.		<i>Cerithium</i> sp.	<i>Strombus gibberulus albus</i>	<i>Conus rattus</i>	<i>Turbo</i> sp.
<i>Tripneustes gratilla</i>		<i>Cerithium carbonarium</i>	<i>Strombus mutabilis</i>	<i>Conus poblianus</i>	<i>Ovula ovum</i>
<i>Prionocidaris</i> sp.		<i>Cerithium vertagus</i>	<i>Strombus</i> sp. 1	<i>Thais schinata</i>	<i>Oliva annulata</i>
<i>Salmacis sphaeroides</i>		<i>Cypraea moneta</i>	<i>Strombus</i> sp. 2	<i>Thais bufo</i>	<i>Ischnochiton</i> sp.
<i>Echinometra oblongata</i>		<i>Cypraea annulus</i>	<i>Strombus</i> sp. 3	<i>Polinices tumulus</i>	<i>Cardium</i> sp.
<i>Protoreaster</i> sp.		<i>Cypraea tigris</i>	<i>Strombus</i> sp. 4	<i>Polinices flemingiana</i>	<i>Tridacna crocea</i>
<i>Linkia laevigata</i>		<i>Cypraea olivacea</i>	<i>Strombus</i> sp. 5	<i>Nassarius bicolor</i>	<i>Spondylus spogdylus</i>
<i>Archaster typicus</i>		<i>Cypraea isabella</i>	<i>Strombus</i> sp. 6	<i>Nassarius subspinosum</i>	<i>Spondylus</i> sp. 1
<i>Mastiphiotrix</i> sp.		<i>Cypraea poivigi</i>	<i>Strombus</i> sp. 7	<i>Bulla ampula</i>	<i>Spondylus</i> sp. 2
<i>Ophiomastrix</i> sp.		<i>Telescopium telescopium</i>	<i>Strombus</i> sp. 8	<i>Nerita undata</i>	<i>Malleus malleus</i>
<i>Ophiorachna inressata</i>		<i>Cypraea labrolineata</i>	<i>Dostorsio anus</i>	<i>Nerita exuvia</i>	<i>Anadara maculosa</i>

Appendix 8 Birds found in Olango Island Wildlife Sanctuary (from PAWD-EMPAS DENR-7 1993)

Common name	Scientific name	Status	Abundance
Yellow Bittern	<i>Ixobrychus sinensis</i>	R	2
Chinese Egret	<i>Egretta eulophotes</i>	P/N/E	3
Little Egret	<i>Egretta garzetta</i>	P/N	3
Intermediate Egret	<i>Egretta intermedia</i>	R	1
Reef Egret	<i>Egretta sacra</i>	R/V	1
Cattle Egret	<i>Bubulcus ibis</i>	R/V	1
Green-backed Heron	<i>Butorides striatus</i>	R	3
Grey Heron	<i>Ardea cinerea</i>	N/V	1
Purple Heron	<i>Ardea purpurea</i>	R/V	1
Northern Shoveler	<i>Anas clypeata</i>	N/V	1
Garganey	<i>Anas querquedula</i>	N/P	1
Buff-banded Rail	<i>Rallus philippensis</i>	R	2
Barred Rail	<i>Rallus torquatos</i>	R	2
Lesser Frigate-bird	<i>Freagata ariel</i>	P/V	1
Common Black-headed Gull	<i>Larus ridibundus</i>	P/N	3
Japanese Gull	<i>Larus crassirostris</i>	P/V	1
Common Tern	<i>Sterna hirundo</i>	P/N	3
Little Tern	<i>Sterna albifrons</i>	R/P	3
Black-naped Tern	<i>Sterna sumatrana</i>	R/V	1
Gull-billed Tern	<i>Gelochelidon nilotica</i>	P/N	3
Whiskered Tern	<i>Chlidonias hybrida</i>	P/N	3
White-winged Black-Tern	<i>Chlidonias leucoptera</i>	P/N	2
Paleartic Oyster-catcher	<i>Haematopus ostralegus</i>	L/V	1
Pacific Golden Plover	<i>Pluvialis fulva</i>	P/N	3
Grey Plover	<i>Pluvialis squatarola</i>	P/N	3
Lesser Sand Plover	<i>Charadrius mongolus</i>	P/N	3
Greater Sand-Plover	<i>Charadrius leschenaultii</i>	P/N	3
Little Ringed Plover	<i>Charadrius dubius</i>	P/N/V	1
Kentish Plover	<i>Charadrius alexandrinus</i>	P/N	3
Black-tailed Godwit	<i>Limosa limosa</i>	P/N	2
Bar-tailed Godwit	<i>Limosa lapponica</i>	P/N	3
Little Curlew	<i>Numenius minutus</i>	N/V	1
Whimbrel	<i>Numenius phaeopus</i>	P/N	2
Western Curlew	<i>Numenius arquata</i>	P/N	3
Far-eastern Curlew	<i>Numenius madagascariensis</i>	P/N	3
Common Redshank	<i>Tringa totanus</i>	P/N	3
Common Greenshank	<i>Tringa nebularia</i>	P/N	3
Wood Sandpiper	<i>Tringa glareola</i>	P/N/V	1
Marsh Sandpiper	<i>Tringa stagnatilis</i>	P/N/V	1

(Appendix 8 continued)

Common name	Scientific name	Status	Abundance
Common Sandpiper	<i>Actitis hypoleucos</i>	P/N	3
Grey-tailed Tattler	<i>Heteroscelus brevipes</i>	P/N	3
Terek Sandpiper	<i>Xenus cinereus</i>	P/N	3
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>	P/N	1
Curlew Sandpiper	<i>Calidris ferruginea</i>	P/N	3
Red Knot	<i>Calidris canutus</i>	P/N	3
Great Knot	<i>Calidris tenuirostris</i>	P/N	3
Rufous-necked Stint	<i>Calidris ruficollis</i>	P/N	3
Sanderling	<i>Calidris alba</i>	P/N	2
Broad-billed Sandpiper	<i>Limicola falcinellus</i>	P/N/V	1
Ruddy Turnstone	<i>Arenaria interpres</i>	P/N	3
Asiatic Dowitcher	<i>Limnodromus semipalmatus</i>	P/N	3
Swinhoe's Snipe	<i>Gallinago megala</i>	P/N/V	1
Red-necked Phalarope	<i>Phalaropus lobatus</i>	P/N/V	1
Peregrine Falcon	<i>Falco peregrinus</i>	R/V	1
Blue-breasted Quail	<i>Coturnix chinensis</i>	R	1
Emerald Dove	<i>Chalcophaps indica</i>	R	2
Island Collared-Dove	<i>Streptopelia bitorquata</i>	R	2
Spotted Dove	<i>Streptopelia chinensis</i>	R	3
White-eared Brown Fruit Dove	<i>Phapitreron leucotis</i>	R	2
Zebra Dove	<i>Geopelia striata</i>	R	3
Colasisi	<i>Loriculus philippensis</i>	R	1
Greater Coucal	<i>Centropus sinensis</i>	R	2
Lesser Coucal	<i>Centropus bengalensis</i>	R	2
Philippine Coucal	<i>Centropus viridis</i>	R	2
Oriental Cuckoo	<i>Cuculus saturatus</i>	P	2
Koel	<i>Eudynamys scolopacea</i>	R	2
Short-eared Owl	<i>Asio flammeus</i>	R	1
Common Kingfisher	<i>Alcedo atthis</i>	R	1
Variable Dwarf-Kingfisher	<i>Ceyx lepidus</i>	R	1
White-collared Kingfisher	<i>Halcyon chloris</i>	R	3
Barn Swallow	<i>Hirundo rustica</i>	P	3
Red-rumped Swallow	<i>Hirundo daurica</i>	R/P	2
Pacific Swallow	<i>Hirundo tahitica</i>	R/P	3
Richard's Pipit	<i>Anthus novaeseelandiae</i>	R	3
Pechora Pipit	<i>Anthus gustavi</i>	R/P	3
Grey Wagtail	<i>Motacilla cinerea</i>	R/P	2
Pied Triller	<i>Lalage nigra</i>	R	3
Philippine Bulbul	<i>Hypsipetes philippinus</i>	R	3
Yellow-vented Bulbul	<i>Pycnonotus goiavier</i>	R	3
Brown Shrike	<i>Lanius cristatus</i>	P	3

(Appendix 8 continued)

Common name	Scientific name	Status	Abundance
Long-tailed Shrike	<i>Lanius schach</i>	R	2
Asian Glossy Starling	<i>Aplonis panayensis</i>	R	3
Pied Buschat	<i>Saxicola caprata</i>	R	3
Oriental Magpie-Robin	<i>Copsychus saularis</i>	R	3
Bright-capped Cisticola	<i>Cisticola exilis</i>	R	2
Lemon-throated Leaf-Warbler	<i>Phylloscopus cebuensis</i>	R	2
Great Reed Warbler	<i>Acrocephalus arundinaceus</i>	R	3
Oriental Bush Warbler	<i>Cettia diphone</i>	R/P	2
Golden-bellied Flycatcher	<i>Greygone sulphurea</i>	R	2
Pied Fantail	<i>Rhipidura javanica</i>	R	3
Grey-streaked Flycatcher	<i>Muscicapa griseisticta</i>	R/P	2
Large-billed Crow	<i>Corvus macrorhynchos</i>	R	2
Olive-backed Sunbird	<i>Nectarinia jugularis</i>	R	3
Eurasian Tree Sparrow	<i>Passer montanus</i>	R	3
Chestnut Munia	<i>Lonchura malacca</i>	R	3
Malaysian Sand Plover	<i>Charadrius peronii</i>	P/N	1
Blue Rocktrush	<i>Monticola solitarius</i>	P	1

R = resident, present all year

P = passage migrant, regularly passes through the country on its migration between its breeding and non-breeding areas

N = non-breeding winter visitor, presumed not to breed but remains in the country for several months and breed elsewhere

L = little known, status is little known, but is recorded regularly in the country

V = vagrant, accidental visitor in the sanctuary

E = endangered;

Abundance: 1 = very scarce, fewer than 5 records, 2 = uncommon resident or annual visitor, seen fairly regularly; 3 = fairly common to abundant

Appendix 9 Populations of birds monitored in Olango Wildlife Sanctuary in 1996 (A Mapalo unpublished data)

Species	Month												
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
<i>Butorides striatus</i>	2	14	17	14	8	7	4	9	6	10	4	6	101
<i>Egretta eulophotes</i>	94	48	153		41	3	—	21	—	—	6	1	367
<i>Egretta garzetta</i>	14	11	14	11	2	—	—	—	9	8	3	2	74
<i>Bubulcus ibis</i>	—	—	—	—	—	—	—	—	6	—	3		9
<i>Egretta intermedia</i>	—	—	—	15	—	—	8	—	—	—	—		23
<i>Charadrius alexandrinus</i>	12	57	23	27	—	—	—	—	—	—	5	29	153
<i>Charadrius leschenaultii</i>	13	—	88	15	21	12	3	5	29	4	26	71	287
<i>Charadrius mongolus</i>	30	383	377	117	5	3	5	4	27	10	9	17	987
<i>Charadrius peronii</i>	—	—	44										44
<i>Pluvialis fulva</i>	—	—	3	1					37				41
<i>Pluvialis squatarola</i>	55	801	184		9	11		5	33	11	25	12	1146
<i>Actitis hypoleucos</i>	19	3	8				10	2	6		5	7	60
<i>Arenaria interpres</i>	32	30	40	94	9			4			1	15	225
<i>Calidris canutus</i>		30	35					5		4			74
<i>Calidris ferruginea</i>	6	46	12					4	1	4			73
<i>Calidris minuta</i>								23					23
<i>Calidris ruficollis</i>		1049	1304	114	15	5			91	550	208	569	3905
<i>Calidris tenuirostris</i>	128	87	144					3		5	3	8	378
<i>Heteroscelus brevipes</i>	9	184	17	14	7				5			1	237
<i>Limnodromus semipalmatus</i>	39	9	7		2			19	3	5	2		86
<i>Croceethia alba</i>												1	1
<i>Limosa limosa</i>	6	17	25	4	2				9	30	43	9	145

(Appendix 9 continued)

<i>Limosa lapponica</i>	95	209	84	12	36		1	2	47	25	5	9	524
<i>Numenius minutus</i>	3			49	3		1	4	4	4	2		70
<i>Numenius arquata</i>	2	6	2					2		1	3	2	18
<i>Numenius madagascariensis</i>		8	6		5								19
<i>Numenius phaeopus</i>	21	19	28	59	25	4	4	19	5	13	23	12	232
<i>Tringa totanus</i>	25	386	419	303	54	4		13	44	4	30	6	1280
<i>Tringa nebularia</i>	27	34	9	7		2		23	4	1	7	5	119
<i>Xenus cinereus</i>	2	13	4				10	2		1	6	11	49
<i>Sterna nilotica</i>		47	52								1	11	111
<i>Sterna hirundo</i>		1812	1639	27	19	7		12	500	324	593	272	7660
<i>Larus ridibundus</i>	37	194	61					2		19		36	349
<i>Chlidonias leucoptera</i>			1	2	3				4		51		61
<i>Chlidonias hybrida</i>		8											8
<i>Sterna albifrons</i>		7		1							1		9
<i>Halcyon chloris</i>			5					1					6
TOTAL	671	5512	4805	886	266	58	45	184	870	1033	1065	3567	18962

Appendix 10 Fishing equipment and income yielded on Olango Island (CRMP 1998)

	Fishing type					
	Fish trap (pangal)	Multiple hook & line	Push net (sud-sud)	Tropical aquarium trade	Abalone trade	Shell trade (Pandayo)
Barangays involved	Cao-oy, San Vincente	Sabang	Sabang, Talima, San Vincente	Santa Rosa, San Vincente, Sabang	Tungasan, Sabang, Baring, Tingo	Talima, Baring, Tingo
Average catch per unit effort (kg/day)	4–8	3–4	2.4–3.6	3–5	6–8	5–6
Fishing area	Between Bohol & Cebu	Between Bohol & Cebu	Seagrass beds around Olango Is	Visayas Islands, Palawan	Olango Is., Bohol, Palawan	Palawan, Mindoro
Average earning per day (Peso)	245	90–120	14–21	100–160	120–150	–
Target species	Droversal fishes	Pelagic fishes	Cowries, <i>Nassa</i> shells	Aquarium fishes	Abalone	Shells, octopus, sea cucumber
Number of fishermen involved	150–200	90–120	150–200	600	110–150	400–800

