
The *dai trey linh* fishery on the Tonle Touch (Touch River), southeast Cambodia

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ABSTRACT

The *dai trey linh* fishery is a previously unstudied bag-net (or stationary trawl) fishery that has operated since 1981 on a distributary river system east of the Mekong near the border with Viet Nam. The fishery, based on seven licensed bag-nets (*dais*), catches primarily *trey linh* and other white fish that, having migrated out of floodplains, are moving down-river. *Trey linh* are the abundant small cyprinids, *Cirrhinus lobatus* and *Cirrhinus siamensis*, known as *trey riel* elsewhere in Cambodia. The *dais* operate from June to December; other *dai* fisheries in Cambodia operate later in the year. Although licensed, the operators of the *dais* do not comply with licence conditions; for example, they are larger than permitted and fishing goes on for longer than permitted.

Monitoring of the fishery took place during the 2003 season. During this period, the composition of the fish fauna and the size fish changed; the early catch comprised larger fish that had spawned on the floodplain, but later in the season the catch included smaller fish that had grown on the floodplain. Although 161 fish species and one shrimp species were recorded, 80% of the total weight of the catch was made up of only five small cyprinid species, and 69% of this was *trey linh*. Virtually all fish were 0+ fish; i.e. in their first year of life. The size of small fish species increased during the season. Catches peaked between July and September. Most of the catch was exported to Viet Nam for food or for aquaculture feed. The total catch in 2003 was 404 tonnes valued at Riel340 M, or about US\$85,000, with an average price of around US\$0.21/kg; larger species were more valuable, the most expensive sold for US\$1.17/kg.

The 2003 catch was reportedly much lower than in previous years and was only about 20-25% of the 1,600-2,000 tonnes caught in 2002, when unit prices were one-third to one-quarter of 2003 prices. Prices peaked in 2003 when catches peaked as buyers, surprised by the unusually low catch, competed for limited supplies. The small catch in 2003 was a result of the lower than usual flood that reduced fish production; catches were probably also affected by heavy fishing on the floodplains upstream. The dominance of young fish and very small catches of large fish confirm heavy fishing pressure. Illegal mosquito-net fences, set by villagers throughout the floodplain, catch many small fish of all species and limit fish access to habitats. *Dai* operators are in conflict with other fishers, including fishing lot lessees, local villagers, and poachers, as they all catch immature fish that *dais*, or fishers using different tackle, would otherwise catch further downstream. Furthermore, as the brood stock for the fishery may spend the dry season downstream in Vietnamese waters, the *dai trey linh* fishery impacts, and raises, local and cross-boundary issues. Maintaining and increasing fish production would benefit all parties, however to do so requires a concerted effort to reconcile their competing interests.

KEY WORDS: Cambodia, Mekong, river fisheries, fishing, *dai*

INTRODUCTION

Three *dai* (bag net or stationary trawl) fisheries, classified as 'large-scale fisheries' according to 1987 law, operate in Cambodia under licence from the Department of Fisheries. The most well known, the Tonle Sap *dai* fishery, which operates along the Tonle Sap (Sap River) in Phnom Penh and Kandal provinces, has 60 individually licensed and five unlicensed nets arranged in 14 rows. The *dai* catches fish migrating when water drains from the extensive floodplain areas around the Great Lake and Tonle Sap from mid-October to mid-March. This fishery is monitored every year (Ngor and Hem, 2001).

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The fishery described in this paper operates on the Tonle Touch (Touch River) system in Prey Veng province, and is known as *dai trey linh* (Figure 1). The name *trey linh* (or *ca linh* in Vietnamese) denotes a taxon comprising two small cyprinids, *Cirrhinus siamensis* and *Cirrhinus lobatus* (Roberts 1997), that dominate the catch and are known as *trey riel* elsewhere in Cambodia. Other small *Cirrhinus* species and small or juvenile cyprinids are sometimes included in the classification (note that in Khmer *linh* refers to another small cyprinid, *Thynnichthys thynnoides*, which also occurs in *dai* catches). This fishery has seven nets, making it smaller than the Tonle Sap *dai* fishery. There is no accurate published information on this fishery.

The third fishery, known as *dai bongkong* (or freshwater prawn bag net), is also situated in Prey Veng province. This fishery has 13 nets, set to catch the large catadromous prawn *Macrobrachium rosenbergii* (*bongkong*) as well as some fish. Detailed information about this fishery is not available.

The aim of this study, therefore, was to provide basic information about the *dai trey linh* fishery.

Description of the dai trey linh fishery

Location

The Tonle Touch River system begins as an overflow distributary of the Mekong near Kampong Cham (Figure 1). Other distributaries join the river about 20 km downstream of Phnom Penh as well as near Neak Luong (shown as a ferry crossing in Figure 1). Further downstream the river splits into two main branches, the Tonle Touch to the west and Prek Trabek to the east.

Although much of the water in the Tonle Touch River is derived from the Mekong when it overflows during the flood season, the river also drains a catchment area of about 3-4,000 km², including the extensive floodplains along the eastern side of the Mekong between Kampong Cham and the

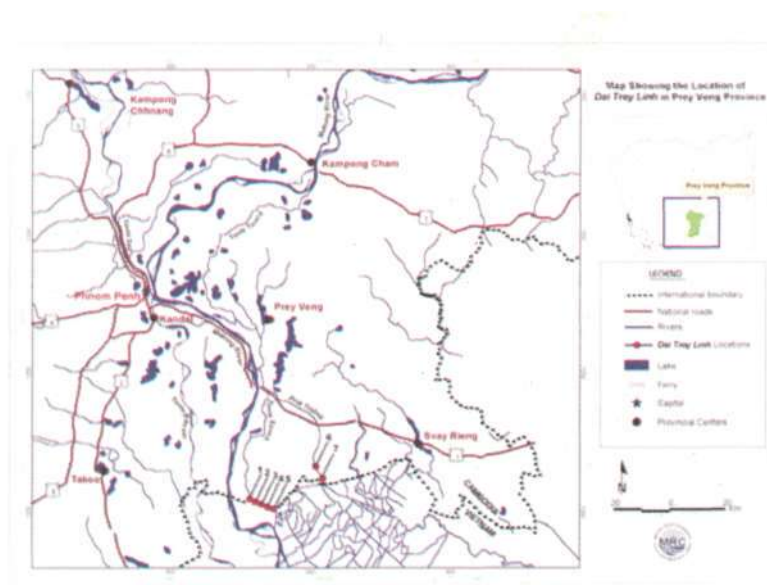


Figure 1. Location of the *dai trey linh*

Vietnamese border. In high-flood years, for example 2000, floods inundate almost the entire floodplain southeast of the town of Kampong Cham to the Mekong River in the west (MRC 2003).

Five *dais* are stationed along the stretch of the Tonle Touch that forms a part of the border between Cambodia and Viet Nam (Nos. 1-5 in Figure 1) and two more (Nos. 6 and 7) operate on Prek Trabek stream. The two rivers meander in a south-easterly direction to join the canal systems of the Vietnamese part of the delta. The floodplain stretches mainly across agricultural land used for single crop rice, but in Viet Nam, irrigation systems such as canals and floodgates allow biannual cultivation of rice.

History and licensing

This fishery started operating in 1981 and was legalised as a large-scale fishery in 1987. Ethnic Vietnamese operate the fishery under an exclusive two-year exploitation concession auctioned by the government to the highest bidder. This is one way the government extracts rent from fisheries. Currently the official fee is Riel52.9 M/yr or about US\$13,200/yr.

Season of operation

The *dai trey link* fishery is permitted to operate from August to December, but in actual fact operates from June to December, and sometimes continues to January; peak catches take place in September. Cambodian fisheries law prohibits operation of other medium and large-scale fisheries during some of this period. The open season for most other fisheries, including the Tonle Sap *dai* fishery, is from October to June. Licence conditions are similar to those of other large-scale fisheries.

Fishing gear

Each licence permits the use of a single conical bag net, or *dai*, to filter river water. The permits specify that the mouth of the net should be no more than 27 m wide and that the *dai* leave space in the river through which other craft may navigate. At the *dai trey link* fishery however, nets are 40-55 m wide and block 40-60% of the river.

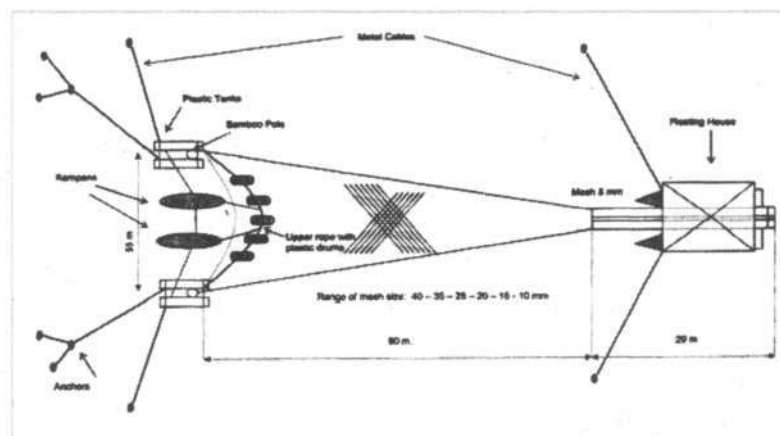


Figure 2. Schematic plan view of *dai trey link*

Dai width and depth are adjustable; depth is about 7-10 m with a small gap between the net and the riverbed, length is about 110 m and mesh aperture reduces from about 4 cm at the mouth to 0.8 cm at the cod-end.

Each *dai* is suspended from four empty 500 L plastic drums (two each side) that are attached by metal cables to anchors. Two bamboo poles (*dang chhi*) attached to either side of the drums keep the mouth of the net open and adjust the depth of the mouth. Sampans in the centre of each *dai* stretch the upper and lower ropes and keep it stable. The crew of the *dai* use a winch to raise the cod-end of the bag onto wooden boats, which also support a small house.

All but one of the *dais* have one cod-end on the net. *Dai* No. 1 has two cod-ends that the crew empty alternately; this halves the volume of fish handled and reduces the time that fish spend in the net. The crew empty the nets and transfer the fish to live-wells in the hull of transport junks; here they separate the dead or dying fish using hand-nets. Live fish are sold mainly for human consumption while dead fish, which fetch a lower price, sell for fish-feed. The *dai* operators also keep cages of snakehead (*Channa* spp.) along the riverbank, these are fed with dead fish from the *dais*.

Basis for the fishery

The Mekong floods from May to December each year; at Phnom Penh levels usually peak in September when flow is on average about 20 times the minimum flow in the dry season (MRC 2003). The floodwaters inundate large areas and provide rich habitats in which fish can feed and rapidly grow. Many fish spawn upstream of the floodplains in the Mekong River and its tributaries (Poulsen *et al.* 2003). The early floods carry large numbers of fish eggs and fry on to the inundated floodplains. Some riverine (whitefish) species also swim into these flooded areas to spawn and feed. According to *dai trey link* fishers, this local spawning peaks in the early flood period (usually July) and finishes mid-flood (usually September).

Early in the season, larger whitefish are caught as they migrate back out of the floodplains after spawning. Later, smaller fish (fingerlings or fry) are caught as they migrate back to the river after a period of weeks or months feeding on the floodplains. The Tonle Sap *dai* fishery operates later in the year because the Great Lake and its extensive floodplains act as a reservoir to delay the return of flows down the Tonle Sap (Ngor and Hem 2001). Although falling water levels may trigger migration off floodplains to the Tonle Sap, the primary reason is likely to be deteriorating water quality caused by decomposing vegetation. Welcomme (1985) records whitefish, which are relatively intolerant of low oxygen and pH, leaving the floodplains as water quality deteriorated.

River levels at the *dai trey link* fishery may be still rising at the time of peak catches in September. The *dai trey link* fishers believe that increasing quantities of 'black water' from floodplains flowing to the river signals the exodus of small whitefish from the floodplain to the river. The earlier migration off the floodplain (compared to the Tonle Sap fishery) probably reflects differences in floodplain hydrology and land use.

METHODS

This study was carried out at the *dai trey link* fishery from July to December 2003. In order to obtain an accurate estimate of the volume and composition of the catch, data collectors, specially trained in fish identification, were stationed at each *dai* during the weekdays.

Dais operate round the clock during the fishing season and the interval at which the crew empties and clears nets depends on the size of the catch; it may be every one to two hours when the catch is small or up to every ten minutes when the catch is large. Therefore, in order to obtain an estimate the total daily catch, the data collectors weighed ten daytime and five night-time hauls selected at random. In addition, they also took samples from at least four hauls to gauge the composition of fish species in the catch. They used a photo flipchart of over 200 species based on the Mekong Fish Database (2003) to identify the fish. They then weighed sub-samples of fish, sorted by species, using calibrated balances, and took measurements of the length of representatives of some the common species with a measuring board accurate to one millimetre. A number of fish belonging to the most common taxa were dissected to determine the stage of sexual development.

Dai operators provided information on the value of each species and other details about the operation of the business and, along with provincial fisheries officers, gave their views on general aspects of the fishery and its place in the local fishing industry.

RESULTS

Appendices 1-3 give monthly details of the quantity, total value, and unit price of all the species fish recorded during the survey.

Size of catch

Table 1. *Monthly and annual dai trey link catch, 2003*

<i>Dai</i>	Monthly catches (kg/mo)						Total	% of total
	July	Aug	Sept	Oct	Nov	Dec		
1	44	720	171,701	71,421	7,700	5,040	256,626	63.5
2	22	194	18,459	10,793	5,040	3,361	37,869	9.4
3	23	304	8,085	16,474	2,373	733	27,992	6.9
4	29	53	8,055	11,195	575	322	20,229	5.0
5		97	963	1,762	463	321	3,606	0.9
6		32	36,944	6,143	1,732	620	45,471	11.3
7		170	4,905	4,369	1,960	877	12,281	3.0
Total	118	1,570	249,112	122,157	19,843	11,274	404,074	
% of total	0.03	0.39	61.65	30.23	4.91	2.79		

Most *dais* recovered their largest monthly catch during September when over half the total annual haul of 404 tonnes was landed. *Dias* N° 3 and 4 recorded their largest catch slightly later, in October. *Dai* No.1, the *dai* farthest upstream on the Tonle Touch, recovered most (64%) of the total catch.

The catch in July was very low, barely enough to provide some food for the crew of the *dai*. The larger catches in August allowed *dai* owners to feed their snakeheads held in cages nearby. Sales began in September. Vietnamese, who come to the *dais* (except *Dai* N° 6) by boat, buy nearly all the live catch. In 2003, exports to Viet Nam, largely to Dong Thap Province, accounted for 90% of the *dai trey linh*'s production.

Figure 3a shows that the peak catch of the fishery and the peak water level at the Neak Loeung hydrological station were both in September. *Dai* catches increased as water levels rose, with three peaks evident, each separated by 10 days (24th August, 3rd and 13th September). As water levels fell, a series of smaller peaks was evident, separated by 10-15 day intervals. The water level in 2003 was the lowest of the years from 1999 and 2003 (Figure 3b). *Dai* operators said that their catches were about 20-25% of those in 2002, and also lower than in earlier years.

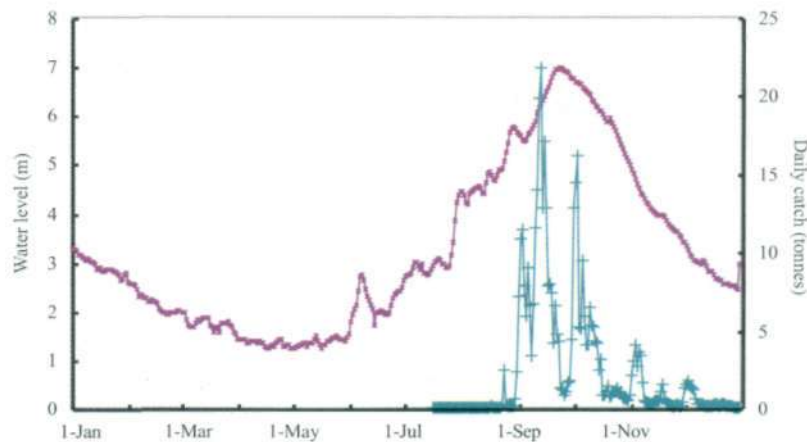


Figure 3a. Weight of catch compared with the level of the Mekong in 2003.

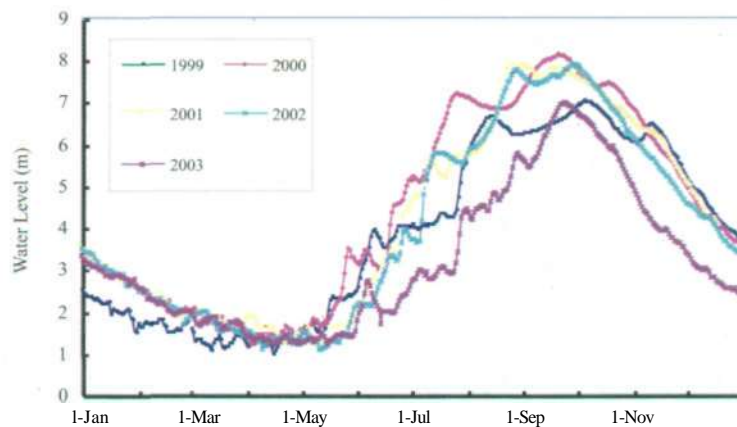


Figure 3b. Level of the Mekong in 2003 compared with the average level during the years 1999 to 2002.

Composition of catch

The survey recorded 161 fish species and one shrimp, *M. rosenbergii*. The ten most abundant species made up 85% of the catch by weight, and the five most abundant species, small cyprinids, comprised about 80% of the catch. (Table 2). Two *trey riel* species together made up about 69% of total catch.

Table 2. Composition of catch giving total weight (kg) of the ten most abundant species

Khmer name <i>Scientific name</i>	Jul	Aug	Sep	Oct	Nov	Dec	Total	%
Riel tob <i>C. siamensis</i>	1	299	124,897	22 222	591	564	148,574	36.8
Riel awng kam <i>C. lobatus</i>	6	234	62,199	66,200	566	1,300	130,505	32.3
Arch kok <i>Labioharbus siamensis</i>	0	5	6,923	9,139	539	312	16,918	4.2
Sloeuk russey <i>Paralaubuca typus</i>	0	2	13,164	2,150	285	88	15,689	3.9
Khnang veng <i>Labioharbus kuhli</i>	1	7	1,184	4,598	2,028	1,277	9,095	2.3
Pruol kralang <i>Cirrhinus microlepis</i>	0	0	5,060	2,147	241	84	7,532	1.9
Chhpin <i>Hypsiharbus malcolmi</i>	0	0	4,068	490	165	24	4,747	1.2
Kanhchrouk chhnot <i>Botia helodes</i>	0	11	2,450	978	796	182	4,417	1.1
Chra keng <i>Puntioplites proctozysron</i>	0	0	1,783	303	1,769	259	4,114	1.0
Pra <i>Pangasianodon hypophthalmus</i>	0	56	3,026	579	235	138	4,034	1.0
Others (152 species)	110	956	24,358	13,351	12,628	7,046	58,449	14.5
Total (all species)	118	1,570	249,112	122,157	19,843	11,274	404,074	

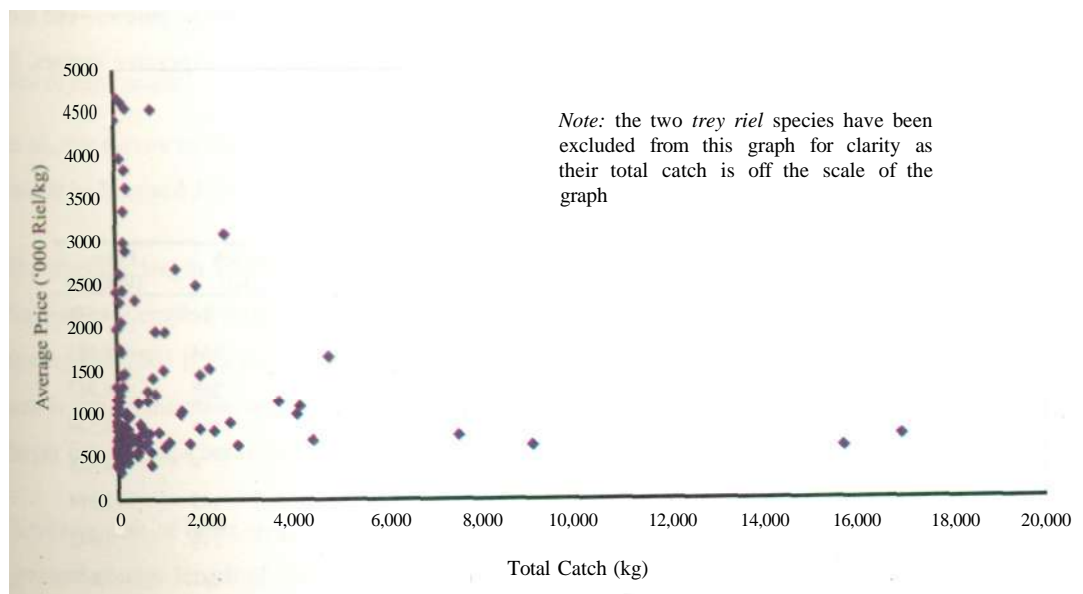


Table 3. Total value of catch (R1000s) and the ten most valuable species

Khmer name Scientific name	Jul	Aug	Sep	Oct	Nov	Dec	Total	%	R/kg
Riel lob <i>C. siamensis</i>	1	123	97,956	14,581	343	307	113,311	33.5	763
Riel awng kam <i>C. lobatus</i>	2	90	52,472	43,374	405	670	97,012	28.7	743
Arch kok <i>Lahio barbatus siamensis</i>	0	2	4,940	6,705	516	620	12,783	3.8	756
Sloeuk russey <i>Paralaubuca typus</i>	0	1	8,061	1,332	140	48	9,582	2.8	611
Chhpin <i>Hypsibarbus malcolmi</i>	0	0	6,835	855	206	32	7,928	2.3	872
Kes <i>Micronema apogon</i>	7	79	3,700	960	2,463	492	7,701	2.3	1,022
Pruol/kralang <i>Cirrhinus microiepis</i>	0	0	3,942	1,586	117	49	5,695	1.7	1,200
Khngang veng <i>Lahio barbatus kuhli</i>	0	2	596	3,960	880	255	5,694	1.7	1,289
Ros/ptuok <i>Channa striata</i>	4	24	2,486	941	805	332	4,593	1.4	1,116
Chra keng <i>Puntioplites proctozysron</i>	0	0	2,937	555	842	150	4,484	1.3	1,112
Others (152 species)	268	1,080	29,452	18,114	14,482	6,016	69,411	20.5	1,187
Total (all species)	282	1,400	213,377	92,964	21,200	8,971	338,194		

Value of catch

The total value of the catch was Riel 338,194, or about US\$84,549 (Table 3). The ten most abundant species accounted for nearly 80% of the value of the catch although their unit value (R/kg) was relatively low (Table 3). About 62% of the value came from the sale of *trey riel*. *Dai N^o1* earned 61% of the total value of fish catch.

The abundance of a species of fish bears little relation to its value; while some of the most expensive fish (R/kg) were among the rarest species; many rarer species fetched lower prices (Figure 4). The most valuable species sold for between Riel 3-4,000/kg (US\$0.75-1.00/kg); the most expensive species, the kray (*Chitala blanci*) fetched Riel 4.676/kg (Table 4).

Table 4. The ten most valuable species (R/kg) in the *dai trey link* fishery

Khmer name	Species	Catch (kg)	Price (R/kg)
Kray	<i>Chitala blanci</i>	71	4,676
Khchoeung	<i>Macrornathus taeniagaster</i>	144	4,633
Bong kong (shrimp)	<i>Macrobrachium rosenbergii</i>	268	4,562
Khchoeung	<i>Mastacembalus favus</i>	809	4,539
Prama	<i>Boesemania microiepis</i>	8	4,425
Kes	<i>Micronema bleekeri</i>	105	3,974
Kes	<i>Kryptopterus micronema</i>	218	3,842
Tranel	<i>Hemibagrus filamentus</i>	261	3,644
Slat/kray	<i>Chitala lopis</i>	196	3,357
Kes	<i>Micronema apogon</i>	2,480	3,105

In 2003, the prices of fish reached a peak in September or October depending on the species; for example, sales of *trey riel*, the most commercially important component of the catch, reached a peak in September (Table 5). During these months, the total weight of the catch also reached its peak. Usually prices are low when catches are high but in 2003 the unusually low total catch kept prices buoyant. Buyers, who had planned to buy in the peak months, competed for limited supplies, driving prices upwards.

Discussions with *dai* owners and an appraisal of their limited logbook data shows that catch rates in 2003 were 20-25% of those in 2002 while unit prices were three to four times higher.

Table 5. Monthly price (R/kg) for the ten species that contributed most to the value of sales

Khmer name Scientific name	Jul	Aug	Sep	Oct	Nov	Dec	Mean
Riel tob <i>C. siamensis</i>	500	411	784	656	581	545	763
Riel tob <i>C. siamensis</i>	500	411	784	656	581	545	763
Riel awng kam <i>C. lobatus</i>	288	383	844	655	715	515	743
Sloeuk russey <i>Paralaubuca typus</i>		400	612	620	491	548	611
Chhpin <i>Hypsibarbus malcolmi</i>			1,680	1,744	1,248	1,327	1,670
lies <i>Micronema apogon</i>	2,417	3,611	3,439	3,678	3,328	1,300	3,105
Pruol/kralang <i>Cirrhinus microlepis</i>			779	739	486	587	756
Khnam veng <i>Labiobarbus kuhli</i>		314	503	861	434	200	626
Ros/ptuok <i>Channa striata</i>	2,000	747	3,123	1,646	2,615	2,577	2,498
Chra keng <i>Puntioplites proctozysron</i>			1,647	1,832	476	578	1,090
Mean price (all species)	2,400	892	857	761	1068	796	837

Size of fish caught

In all, the survey recorded the length of 28,589 fish (Table 6); the only exclusions were a few large fish caught in June and July.

The average length of the five common small cyprinid species increased from August through to November. Length-frequency data indicates that almost all the fish of these species were offspring spawned in 2003 (0+), only a very few (<1%) fish were older (1+) suggesting the increase in average size is due, in the main, to rapid growth of juvenile fish. The December catch however, recovered fewer larger fish, perhaps because the smallest fish leave the flooded areas last.

Similarly, fish of other species were also largely the progeny of spawning during 2003. However, the greatest average length of some species occurred in earlier months because samples collected at these times contained some larger, older, fish. For example, in the instance of *Puntioplites falcifer*, while 0+ fish dominated the catch, 1+ fish were more common in September and as a result the average length of individuals in that month was greater.

Table 6. Weight of catch, mean length (per Month) and total number of the 18 most common fish species caught in the *dai trey linh* fishery from August to December 2003

Khmer name Scientific name	Catch (kg)	Mean total monthly length (cm)					Total number
		Aug	Sept	Oct	Nov	Dec	
Riel top <i>C. siamensis</i>	148,574	5.3	6.9	8.4	11.1	9.0	4,617
Riel ong kam <i>C. lobatus</i>	130,505	6.1	7.2	8.3	9.5	8.6	7,520
Arch kok <i>Labiobarbus siamensis</i>	16,918	7.1	6.8	8.8	9.3	7.4	3,750
Sloeuk russey <i>Paralaubuca typus</i>	15,689		7.5	8.0	9.1	8.0	2,442
Khngang veng <i>Labiobarbus kuhli</i>	9,095	9.2	7.1	8.3	8.5	8.0	2,503
Pruol/kralang <i>Cirrhinus microlepis</i>	7,532		11.6	12.1	11.6	10.8	910
Chhpin <i>Hypsibarbus</i> spp.	6,647		13.7	10.5	10.3	9.9	304
Pra <i>Pangasianodon hypophthalmus</i>	4,034	7.3	12.2	12.9	11.9	12.5	663
Kes <i>Micronema</i> spp.	2,480	23.9	22.9	19.2	15.5	14.4	723
Kaek <i>Labeo chrysophekadion</i>	2,235	5.0	7.7	10.4	9.6	9.4	527
Chan teas phluk <i>Parachela</i> spp.	2,094		7.0	6.2	8.6	7.9	507
Ampil turn <i>Puntius orphoides</i>	1,898		13.6	9.5	12.5	13.1	51
Linh <i>Thynnichthys thynnoides</i>	1,700	6.7	7.8			14.4	156
Chhkok <i>Cyclocheilichthys enoplos</i>	1,504		13.9	8.4	8.8	9.6	1,031
Chlaing hai <i>Belodontichthys truncates</i>	1,081		20.5	22.7	21.0	23.5	88
Chra keng <i>Puntioplites falcifer</i>	714	6.8	10.4	8.7	7.6	7.3	2,458
Krom <i>Osteochilus melanopleura</i>	705		6.0	12.5	9.4	11.2	252
Khman <i>Hampala</i> spp.	217		15.0	13.8	10.4	10.9	87
Total							28,589

Stage of maturity

July catches were small, mostly comprising larger whitefish with ripe gonads (i.e. full of eggs) and ready to spawn. The few large fish caught in August and September were in poor condition having already spawned. These general observations confirmed the time of migration and local spawning on the floodplain reported by the *dai* fishers. The catch of spawning fish early in the season shows that some fish move downstream on their spawning migration (the *dais* cannot catch fish swimming upstream).

Conflicts in the *dai trey linh* fishery

As the fishery operates in the closed fishing season conflicts frequently occur between *dai trey linh* operators, fishing lot lessees, poachers, and villagers. The various fisher's perspectives may be summarised as follows:

1. *Dai trey linh* owners: the *dais* depend on the small cyprinids that migrate down the river and out

of the floodplains back to the river. Illegal fishing on the floodplains and in rivers has a serious impact on *dai trey linh* production. The most common illegal fishing gear used is mosquito-netting fences with traps (locally known as *say yoeun*). Local fishers or villagers in collusion with fishing lot lessees operate these. In an effort to prevent this illegal fishing, *dai* operators cooperate with local fishery inspectors and help to patrol the river or floodplains. *Dais* are permitted to operate only in specific locations, but when the river overtops its banks, downstream-moving fish may not be caught by the *dais*, so they are moved to other more favourable, but non-permitted, areas. This creates conflicts, especially with fishing lot lessees.

2. Fishing lot lessees: most floodplain areas along the *Tonle Touch* are fishing lots. Cambodian fisheries law prohibits large-scale fisheries, particularly fishing lots, from operating in the closed season. Lessees have a right to protect their lots from illegal fishing practices. However, some lessees rent parts of their lot to fishers, who use illegal gear such as *say yoeun*, creating conflict amongst *dai trey linh* owners, lot lessees and other fishers. When water starts flowing out of the floodplains back into the river lessees often block streams or canals with bamboo fences to keep fish in their lots. This reduces the production of the *dai* fishery and leads to further conflict.
3. Poachers: poaching often takes place at night upstream of the *dais*, especially during peak catch periods. Poachers can sometimes catch huge amounts of fish in a short period, quickly covering the costs of fishing gear.
4. Villagers: although fishing with *say yoeun* is illegal, these nets are widely used by villagers in the floodplains and river near their homes. Some nets measure hundreds of metres in length and block extensive areas of floodplain. The catch is not just for home consumption; they also sell large quantities of very young fish for snakehead feed. *Dai* operators who buy a legal fishing license want provincial fishery officers to prevent these illegal practices so that they can catch more fish. However, villagers try to protect their fishing gear from confiscation.

DISCUSSION

The *dai trey linh* fishery catch is much smaller than the *dai* Tonle Sap catch, as it has only seven nets (as opposed to 65). The *dai trey linh* fishery reportedly caught 1,600-2,000 tonnes in 2002, and we recorded 404 tonnes in 2003. In the same years, the Tonle Sap *dai* fishery caught 12,427 tons and 6,551 tons respectively (MRC/DOF monitoring data). Low flood levels in 2003 severely affected both fisheries. The *dai trey linh* fishery catch was mostly (69%) very small (0+) *trey riel* and other small cyprinids, whereas the *dai* Tonle Sap catches more large fish, in 2003-4 *trey riel* comprised only about 40% of its catch by weight.

The very high proportion of *trey riel* and other small cyprinids and the preponderance 0+ fish are signs that the fishery is heavily 'fished down', removing larger fish and larger species. Even if the fishery were stable from year-to-year, many very small, young fish are being taken, both by the *dais* and by *say yoeun* when they are even younger, upstream in the floodplains. Because many fishers are in

competition it pays each of them to take any fish of any size and so the total yield of the fishery suffers, as fish are not given time to grow. This is both a local and an international, or trans-boundary, issue as any fish that manage to pass the *dais* would normally pass into Viet Nam, and have time grow more before finally being caught. It also seems likely that the larger fish caught at the start of the season are attempting to return (swimming downstream) to dry-season refuges in Viet Nam. As Viet Nam imports 90% of the catch, Viet Nam should introduce conservation measures (such as protection of brood stock) to improve production in Cambodia, even if purely out of self-interest.

Fishers can take various measures to conserve their fisheries and to reduce conflicts. Firstly, the *dais* owners and operators should observe the stipulations of fishing license and, in particular, should not start operating until August. They would lose little income as they catch relatively few fish before August, and many are larger fish, the local brood stock. *Dais* owners should not move their gear; this practice leads to conflict and damages their credibility when they demand that others comply with fisheries law they themselves transgress. However, the main issue is the extensive and increasing use of *say yeoun*, which not only unselectively catch all species and all small fish, but also create barriers to colonisation across large sections of floodplain, greatly affecting production. Finally, enforcement regulations should take place within a framework where some form of co-management reconciles competing interests, and when fishers agree to forego short-term benefits for general long-term gains.

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APPENDIX 1

Total Catch (kg) by Species by Months for Dai Trey Link

Khmer name	Scientific name	Month						Total	
		Jul	Aug	Sep	Oct	Nov.	Dec.	Catch (kg)	%
RIEL TOB	<i>Cirrhinus siamensis</i>	1	299	124897	22222	591	564	148,574	36.77%
RIEL AWNG KAM	<i>Cirrhinus lobatus</i>	6	2.54	62199	66200	566	1300	130,505	32.30%
ARCH KOK	<i>Labiobarbus siamensis</i>	0	5	6923	9 139	539	312	16,918	4.19%
SI.OEUK RUSSEY	<i>Paralaubuca typus</i>	0	2	13164	2150	285	88	15,689	3.88%
KHNANG VENG	<i>Labiobarbus kuhli</i>	1	7	1184	4598	2028	1277	9,095	2.25%
PRVOLKRALANG	<i>Cirrhinus microlepis</i>	0	0	5060	2147	241	84	7,532	1.86%
CHHPIN	<i>Hypsibarbus malcolmi</i>	0	0	4068	490	165	24	4,747	1.1 7%
KANHCHROUK CHHNOT	<i>Botia helodes</i>	0	11	2450	978	796	182	4,417	1.09%
CHRA KENG	<i>Puntioplites proctozysron</i>			1783	303	1769	259	4,114	1.02%
PRA	<i>Pangasianodon hypophthalmus</i>	0	56	3026	579	235	138	4,034	1.00%
ANDA T CHHKE	<i>Cynoglossus feldmanni</i>	3	169	1209	645	817	795	3,638	0.90%
CHRA KENG	<i>Puntioplites waandersi</i>	0	33	30	453	1429	823	2,768	0.69%
KRANH	<i>Anabas testudineus</i>	10	110	2005	283	133	27	2,568	0.64%
KES	<i>Micronema apogon</i>	3	22	1076	261	740	378	2,480	0.61%
KAEK	<i>Labeo chrysophekadion</i>	0	1	567	726	516	425	2,235	0.55%
CHHLANHG	<i>Hemibagrus spilopterus</i>	2	8	980	446	406	274	2,116	0.52%
CHHPIN	<i>Hypsibarbus lagleri</i>	0	0	244	1326	278	52	1,900	0.47%
AMPIL TUM	<i>Puntius orphoides</i>	0	0	1761	88	36	13	1,898	0.47%
ROS/PTUOK	<i>Channa striata</i>	2	32	796	572	308	129	1,839	0.46%
LINH	<i>Thynnichthys thynnoides</i>	1	7	1626	57	4	5	1,700	0.42%
CHHKOK	<i>Cyclocheilichthys enoplos</i>	0	0	5X2	286	474	162	1,504	0.37%
CHANTEAS PHLUK	<i>Parachela maculicauda</i>	0	0	985	499	1	0	1,485	0.37%
SANDA Y	<i>Wallago attu</i>	0	21	1318	5	1	10	1,355	0.34%
KANHCHROUK KRAHORM	<i>Bolia modesta</i>	0	23	46	570	425	144	1,208	0.30%
BANDOL AMPOAV	<i>Corica laciniata</i>	0	0	246	338	450	83	1,117	0.28%
RUSCHEK	<i>Acanthopsoides spp.</i>	0	0	26	149	864	77	1,116	0.28%
KHLANG HAI	<i>Belodontichthys truncatus</i>	0	0	461	265	315	40	1,081	0.27%
KANTROB	<i>Pristolepis fasciata</i>	0	0	500	223	163	92	978	0.24%
KAHE LOEUNG	<i>Barbodes schwanefeldii</i>	0	0	877	5	17	3	902	0.22%
SLAT	<i>Notopterus notopterus</i>	0	0	307	95	291	197	890	0.22%
KHMAN	<i>Hampala dispar</i>	0	0	613	60	93	48	814	0.20%
KHCHOEUNG	<i>Mastacembalus favus</i>	60	94	89	339	175	52	809	0.20%
KAMPOT	<i>Tetraodon spp.</i>	0	3	377	284	92	36	792	0.20%
PHKAR KOR	<i>Cirrhinus molitorella</i>	2	0	458	227	57	34	778	0.19%
KANHCHOS CHHNOT	<i>Mystus atrifasciatus</i>	2	7	496	80	14	143	742	0.18%
PO	<i>Pangasius larnaudii</i>	0	10	72	443	173	31	729	0.18%
CHRA KENG	<i>Puntioplites falcifer</i>	0	00	87	45	563	21	714	0.18%
KROM	<i>Osteochilus melanopleura</i>	0	0	263	174	231	37	705	0.17%
KANHCHOS CHHNOT	<i>Mystus mysticetus</i>	0	36	299	177	164	18	694	0.17%
KANHCHROUK	<i>Bolia morleti</i>	0	0	55	73	430	71	629	0.16%
CHANTEAS PHLUK	<i>Parachela siamensis</i>	0	1	6	431	106	29	573	0.14%
CHHVEAT	<i>Pangasius macronema</i>	4	13	207	132	107	78	541	0.13%
CHHLONH	<i>Macrognaathus siamensis</i>	0	8	390	48	56	24	526	0.13%
KANHCHROUK	<i>Bolia beauforti</i>	0	0	160	269	72	5	506	0.13%
CHANGWA MOUL	<i>Rasbora aurotaenia</i>	0	4	170	217	95	16	502	0.12%
CHANGWA CHUNCHUOK	<i>Crossocheilus reticulatus</i>	0	1	42	27	87	342	499	0.12%
KAMPOUL BAY	<i>Cosmochilus harmandi</i>	0	0	264	142	48	39	493	0.12%
KAHE KRORHORM	<i>Barbodes altus</i>	0	0	428	25	22	18	493	0.12%
PRA KANDOL	<i>Helicophagus waandersii</i>	0	4	30.5	107	50	1	467	0.12%
SRAKA KDM	<i>Cyclocheilichthys lagleri</i>	0	0	37	19	49	359	464	0.11%
CHHKOK PHLEUNG	<i>Cyclocheilichthys furcatus</i>	0	0	418	0	6	10	454	0.11%
ANGKAT PRAK	<i>Puntius aurotaeniatus</i>	0	4	8	191	4	213	420	0.10%
KANHCHOS BAY	<i>Mystus albolineatus</i>	3	0	33	52	181	106	375	0.09%
PAVA MOKMUOY	<i>Labeo dyocheilus</i>	0	0	195	97	0	1	293	0.07%
KROS	<i>Osteochilus hasseltii</i>	0	0	239	10	23	16	288	0.07%
CHHMAR	<i>Setipinna melanochir</i>	0	5	260	15	4	0	284	0.07%
BANG KORNG	<i>Macrobrabrium rogenbergii</i>	0	0	64	50	62	92	268	0.07%
TRANEL	<i>Hemibagrus filamentus</i>	0	0	0	175	86	0	261	0.06%
KROS	<i>Osteochilus waandersii</i>	0	0	51	22	47	136	256	0.06%

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Total Catch (kg) by Species by Months for *Dai Trey Link*

Khmer name	Scientific name	Month							Total	
		Jul	Aug	Sep	Oct	Nov.	Dec.	Catch (kg)	%	
KA MPHLE V KHLANH	<i>Kryplopterus cryptopterus</i>	0	54	90	16	75	12	247	0.06%	
KANHCHOS	<i>Mystus singarlingan</i>	2	0	147	45	27	24	245	0.06%	
PROR LUNG/CHRA WLANG	<i>Leptobarbus hoevenii</i>	0	0	162	62	4	13	241	0.06%	
KANHCHROUK LOEVNG	<i>Botia lecontei</i>	0	1	14	185	38	2	240	0.06%	
KA MPHLE V	<i>Kryplopterus hexapterus</i>	0	0	58	0	98	83	239	0.06%	
CHANGWA NONONG	<i>Lobocheilus quadrilineatus</i>	0	0	19	0	32	188	239	0.06%	
ANGKATPRAK	<i>Puntius brevis spp.</i>	0	6	78	48	27	68	227	0.06%	
ANDAT CHHKE	<i>Synaptura marginata</i>	0	8	175	19	21	1	224	0.06%	
KES	<i>Kryplopterus micronema</i>	0	7	0	20	116	75	218	0.05%	
KHMAN	<i>Hampala maerolepidola</i>	6	1	65	22	83	40	217	0.05%	
KROS	<i>Osteochilus microcephalus</i>	0	0	49	4	104	60	217	0.05%	
KRAY	<i>Chitala ornata</i>	0	0	0	215	0	0	215	0.05%	
BANDOL AMPOAV	<i>Clupeichthys aesarnensis</i>	0	0	0	142	70	0	212	0.05%	
KA MPHLEANH SA MREI	<i>Trichogaster trichopterus</i>	0	8	122	41	29	12	212	0.05%	
KAMPHLIEV	<i>Kryplopterus sehilbeides</i>	1	3	3	0	25	173	205	0.05%	
CHHPIN PRAK	<i>Barbodes gonionotus</i>	0	13	180	11	0	0	204	0.05%	
KANHCHOS KDA ONG	<i>Heterobagrus bocourri</i>	0	5	0	22	24	146	197	0.05%	
SLAT/KRAY	<i>Chitala lopis</i>	0	0	0	11	171	14	196	0.05%	
CHHPIN	<i>Hypsibarbus pierrei</i>	0	0	13	132	30	17	192	0.05%	
KANHCHOS CHHNOT	<i>Mystus multiradiatus</i>	0	93	23	41	13	7	177	0.04%	
ANDENG TUNLE	<i>Plotosus canius</i>	0	0	169	0	0	3	172	0.04%	
KHSAN	<i>Channa gachua</i>	3	18	95	12	20	2	150	0.04%	
KES PRAK	<i>Kryplopterus limpok</i>	0	55	89	0	1	0	145	0.04%	
CHHKOK TITUY	<i>Albulichthys albuloides</i>	0	0	110	2	31	2	145	0.04%	
KHCHOUENG	<i>Macrogathus taeniagaster</i>	0	0	47	95	2	0	144	0.04%	
KAMBOT CHRAMOS	<i>Amblyrhynchichthys truncatus</i>	0	0	0	2	104	38	144	0.04%	
KAMPHLIEV	<i>Kryplopterus moorei</i>	0	0	0	73	54	4	131	0.03%	
BANDOL SOK/SMOK	<i>Gyrinocheilus spp.</i>	0	2	57	25	39	8	131	0.03%	
ANDENG TUN	<i>Clarias macrocephalus</i>	0	4	2	8	44	66	124	0.03%	
DANG KHTENG	<i>Macrochirichthys macrochirus</i>	0	0	57	60	1	2	120	0.03%	
ANDAT CHHKE	<i>Cynogiossus puncticeps</i>	2	1	13	91	1	0	108	0.03%	
ANTONG	<i>Monopterus albus</i>	0	0	67	37	1	1	106	0.03%	
KA MPHLE V STOE UNO	<i>Kryplopterus cheveyi</i>	0	4	17	5	60	20	106	0.03%	
KES	<i>Micronema bleekeri</i>	0	1	69	31	4	0	105	0.03%	
SLOEUK RUSSEY	<i>Paralaubuca barroni</i>	0	0	27	73	1	2	103	0.03%	
KRORMORM	<i>Ompok bimaculatus</i>	0	0	44	28	16	8	96	0.02%	
BANG KUOY	<i>Luciosoma bleekeri</i>	0	0	92	2	2	0	96	0.02%	
ANDENG TUN	<i>Clarias meladerma</i>	0	1	2	17	64	4	88	0.02%	
KAMPEUS		0	0	2	14	49	17	82	0.02%	
CHHVEAT	<i>Pangasius polyuranodon</i>	1	7	43	7	5	17	80	0.02%	
KANTRANG PRENG	<i>Parambassis wolffii</i>	0	0	0	17	58	3	78	0.02%	
ANDAT CHHKE	<i>Achiroides leucorhynchus</i>	0	0	41	33	1	3	78	0.02%	
KRAY	<i>Chitala blanci</i>	0	0	0	29	42	0	71	0.02%	
KULREANG/KAHOR	<i>Catlocarpio siamensis</i>	0	0	10	37	23	0	70	0.02%	
KROS	<i>Osteochilus lini</i>	0	1	65	0	4	0	70	0.02%	
SLOEUK RUSSEY	<i>Paralaubuca harmandi</i>	0	0	62	0	0	0	62	0.02%	
PHTONG	<i>Xenentodon cancila spp.</i>	0	0	0	0	25	35	60	0.01%	
SRAKA KDAM	<i>Cyclohellichthys repasson</i>	0	0	4	40	0	15	59	0.01%	
DAMREY	<i>Oxyeleotris marmorata</i>	0	0	0	38	10	9	57	0.01%	
KHCHOUENG	<i>Macrogathus maculatus</i>	0	0	20	26	7	2	55	0.01%	
TA AUN	<i>Wallago leerii</i>	0	0	10	34	8	3	55	0.01%	
BANDOL AMPOAV	<i>Clupeichthys borneensis</i>	0	0	0	0	53	0	53	0.01%	
KE	<i>Pangasius conchophilus</i>	0	0	0	46	1	4	51	0.01%	
ANDAT CHHKE	<i>Brachirus harmandi</i>	0	0	13	29	7	2	51	0.01%	
SRAKA KDAM	<i>Cyclohellichthys apogon</i>	0	0	4	15	10	20	49	0.01%	
PHKAR KOR	<i>Cyclohellichthys armatus</i>	0	0	7	37	3	0	47	0.01%	
BANDOL AMPOAV	<i>clupelchthys goniognathys</i>	0	1	0	0	41	0	42	0.01%	
KUL CHEK	<i>Epalzcorthynchus frenulum</i>	0	1	1	17	4	17	40	0.01%	
CHANGWA	<i>Rasbora myersi</i>	0	1	25	2	1	10	39	0.01%	

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Total Catch (kg) by Species by Months for *Dai Trey Link*

Khmer name	Scientific name	Month							Total		
		Jul	Aug	Sep	Oct	Nov.	Dec.	Catch (kg)	%		
CHANTEAS PHLUK	<i>Parachela willaminae</i>	0	0	9	16	7	4	36	0.01%		
SLOEUK RUSSEY	<i>Paralaubuca riveroi</i>	0	0	30	5	0	0	35	0.01%		
KANHCHOS THMOR	<i>Leiocassis siamensis</i>	0	0	0	10	11	13	34	0.01%		
KANHCHOS	<i>Mystus wolffi</i>	1	2	14	1	6	8	32	0.01%		
KANH CHANH CHRAS THOM	<i>Parambassis apogonoides</i>	0	7	15	9	1	0	32	0.01%		
KANH CHANH CHRAS TOCH	<i>Parambassis siamensis</i>	0	0	14	7	3	7	31	0.01%		
KAMPHLEANH PHLUK	<i>Trichogaster microlepis</i>	0	11	11	0	1	4	27	0.01%		
CHANGWA NONONG	<i>Lobocheilos melanotaenia</i>	0	9	3	7	0	8	27	0.0067%		
ANDAT CHHKE	<i>Brachirus orientalis</i>	0	0	24	1	1	0	26	0.0064%		
CHANGWA PHLIENG	<i>Esomus longimana</i>	0	0	0	4	5	14	23	0.0057%		
SLOEUK RUSSEY	<i>Oxygaster anomaiura</i>	0	0	7	10	0	0	17	0.0042%		
CHANGWA CHHNOT	<i>Rasbora espei</i>	0	0	0	14	0	1	15	0.0037%		
LOLORK SOR	<i>Osteochilus schlegeli</i>	0	0	12	0	2	0	14	0.0035%		
CHANGWA	<i>Rasbora hobelmani</i>	0	0	7	6	1	0	14	0.0035%		
CHANGWA NONONG	<i>Lobocheilos davisi</i>	0	0	0	0	5	7	12	0.0030%		
CHANLUON MOAN	<i>Coilia lindmani</i>	0	2	4	1	3	2	12	0.0030%		
CHANGWA CHHNOT	<i>Boraras urophthalmoides</i>	0	0	0	8	3	0	11	0.0027%		
PRA KHCHOA	<i>Pangasius bocourti</i>	2	1	8	0	0	0	11	0.0027%		
ANDENG ROEUNG	<i>Clarias batrachus</i>	0	0	1	5	0	4	10	0.00%		
KANTHOR	<i>Trichogaster pectoralis</i>	0	0	3	5	0	1	9	0.0022%		
PRAMA	<i>Boesemania microlepis</i>	0	1	0	0	7	0	8	0.00%		
ANTONG	<i>Ophisternon bengalensc</i>	0	0	0	7	0	1	8	0.0020%		
KAMPREAM	<i>Polynemus multifiliis spp.</i>	0	0	0	0	6	1	7	0.0017%		
CHHDOR/DIEP	<i>Channa micropeltes</i>	0	0	0	0	6	0	6	0.0015%		
CARP SAMANH	<i>Cyprinus carpio</i>	0	0	0	2	1	3	6	0.0015%		
CHANLUON MOAN	<i>Coilia macrognathos</i>	0	1	0	0	0	5	6	0.0015%		
KANHCHORN CHEY	<i>Channa lucius</i>	0	0	5	0	0	0	5	0.0012%		
CHEK TUM	<i>Bagrichthys macracanthus</i>	0	1	0	0	1	2	4	0.0010%		
KAOK	<i>Arius caelatus</i>	0	0	0	0	2	1	3	0.0007%		
KANHCHOS KRA WBEY	<i>Glyptothorax fuscus</i>	0	3	0	0	0	0	3	0.0007%		
ANDENG AFRIC	<i>Clarias gariepinus</i>	0	0	0	0	0	2	2	0.0005%		
KRORMORM	<i>Hemislurus mekongensis</i>	0	0	2	0	0	0	2	0.0005%		
TRASORK	<i>Probarbus jullieni</i>	0	0	0	0	2	0	2	0.0005%		
CHANGWA CHHNOT	<i>Rasbora paviei</i>	0	0	0	0	2	0	2	0.0005%		
KANHCHEAK SLA	<i>Toxotes chatareus</i>	0	1	0	1	0	0	2	0.0005%		
CHHPIN KRAHORM	<i>Hypsibarbus wetmorei</i>	0	0	0	0	2	0	2	0.0005%		
KANHCHREA		0	1	0	0	0	0	1	0.0002%		
KAOK	<i>Arius truncatus</i>	0	0	0	0	0	1	1	0.0002%		
CHHKOK POKMOAT BEY	<i>Cyclocheilichthys heteroneta</i>	0	0	0	0	1	0	1	0.0002%		
KHLA /BEY KAMNAT	<i>Systemus partipentazona</i>	0	0	0	1	0	0	1	0.0002%		
KAOK	<i>Hemipimelodus bicolor</i>	0	1	0	0	0	0	1	0.0002%		
KAOK	<i>Hemipimelodus borneensis</i>	0	1	0	0	0	0	1	0.0002%		
PO PRUY	<i>Pangasius sanitwongsei</i>	0	1	0	0	0	0	1	0.0002%		
ANDAT CHHKE	<i>Brachirus panoides</i>	0	1	0	0	0	0	1	0.0002%		
		1	17	249	113	122	165	19843	11274	404083	100.00%

APPENDIX 2

Total Sale Price by Species by Months for *Dai Trey Linh*

Khmer name	Scientific name	Month							Total	
		Jul	Aug	Sep	Oct	Nov.	Dec.	Value	%	
RIEL TOB	<i>Cirrhinus siamensis</i>	1	123	97,956	14,581	343	307	113,311	33.5%	
RIEL AWNG KAM	<i>Cirrhinus lobatus</i>	2	90	52,472	43,374	405	670	97,012	28.7%	
ARCH KOK	<i>Labiobarbus siamensis</i>	0	2	4,940	6,705	516	620	12,783	3.8%	
SLOEUK RUSSEY	<i>Paralaubuca typus</i>	0	1	8,061	1,332	140	48	9,582	2.8%	
CHHPIN	<i>Hypsibarbus malcolmi</i>	0	0	6,835	855	206	32	7,928	2.3%	
KES	<i>Micronema apogon</i>	7	79	3,700	960	2,463	492	7,701	2.3%	
PRUOL/KRALANG	<i>Cirrhinus microlepis</i>	0	0	3,942	1,586	117	49	5,695	1.7%	
KHNANG VENG	<i>Labiobarbus kuhli</i>	0	2	596	3,960	880	255	5,694	1.7%	
ROS/PTUOK	<i>Channa striata</i>	4	24	2,486	941	805	332	4,593	1.4%	
CHRA KENG	<i>Puntius proctozysron</i>	0	0	2,937	555	842	150	4,484	1.3%	
ANDAT CHHKE	<i>Cynoglossus feldmanni</i>	2	149	981	1,086	890	1,060	4,167	1.2%	
PRA	<i>Pangasianodon hypophthalmus</i>	0	20	3,033	519	285	149	4,006	1.2%	
KHCHOEUNG	<i>Mastacembalus fatus</i>	228	362	367	1,861	671	184	3,672	1.1%	
SANDAY	<i>Waliago attu</i>	0	42	3,577	3	3	26	3,651	1.1%	
CHHLANHG	<i>Hemibagrus spilopterus</i>	3	6	1,941	622	516	158	3,246	0.96%	
KANHCHROUK CHHNOT	<i>Botia helodes</i>	0	6	1,819	745	418	106	3,093	0.91%	
CHHPIN	<i>Hypsibarbus lagleri</i>	0	0	131	2,286	303	57	2,777	0.82%	
KRANH	<i>Anabas testudineus</i>	4	100	1,770	314	105	21	2,314	0.68%	
RUSCHEK	<i>Acanthopsoidea spp.</i>	0	0	13	285	1,824	70	2,192	0.65%	
KA EK	<i>Labeo chrysophekadion</i>	0	1	495	784	301	222	1,802	0.53%	
CHRA KENG	<i>Puntius waandersi</i>	0	23	24	398	852	449	1,745	0.52%	
SLAT	<i>Notopterus notopterus</i>	0	0	349	135	964	290	1,738	0.51%	
KHLANG HAI	<i>Belodontichthys truncatus</i>	0	0	579	436	578	49	1,643	0.49%	
AMPIL TUM	<i>Puntius orphoides</i>	0	0	1,484	47	40	13	1,584	0.47%	
CHHKOK	<i>Cyclocheilichthys enoplos</i>	0	0	944	202	264	141	1,551	0.46%	
CHANTEAS PHLUK	<i>Parachela maculicauda</i>	0	0	985	499	0	0	1,484	0.44%	
BANG KORNG	<i>Macrobrabrium rogenbergii</i>	0	0	215	223	319	466	1,223	0.36%	
KHMAN	<i>Hampala dispar</i>	0	0	678	98	334	45	1,154	0.34%	
KAHE LOEUNG	<i>Barbodes sehwanefeldii</i>	0	0	1,090	7	11	2	1,110	0.33%	
LINH	<i>Thynnichthys thynnoides</i>	0	6	1,058	35	3	3	1,105	0.33%	
CHHKOK PHLUNG	<i>Cyclocheilichthys furcatus</i>	0	0	991	0	6	17	1,014	0.30%	
TRANEL	<i>Hemibagrus filamentus</i>	0	0	0	525	426	0	951	0.28%	
PO	<i>Pangasius larnaudii</i>	0	6	93	496	311	25	931	0.28%	
KES	<i>Kryptopterus micronema</i>	0	27	0	48	481	281	838	0.25%	
KANHCHROUK KRAHORM	<i>Botia modesta</i>	0	14	16	520	198	75	822	0.24%	
KROM	<i>Osteochilus melanopleura</i>	0	0	367	224	123	106	819	0.24%	
KANTROB	<i>Pristolepis fasciata</i>	0	0	424	210	84	49	768	0.23%	
BANDOL AMPOAV	<i>Corica laciniata</i>	0	0	96	256	290	50	693	0.20%	
KHCHOUENG	<i>Macrogathus taeniagaster</i>	0	0	118	547	2	0	667	0.20%	
SLAT/KRAY	<i>Chitala lopis</i>	0	0	0	44	599	16	658	0.19%	
KRAY	<i>Chitala ornata</i>	0	0	0	625	0	0	625	0.18%	
KANHCHOS CHHNOT	<i>Mystus atrifasciatus</i>	1	5	415	66	7	71	564	0.17%	
KAMPOUL BAY	<i>Cosmochilus harmandi</i>	0	0	277	217	35	29	558	0.17%	
KANHCHOS CHHNOT	<i>Mystus mysticetus</i>	0	18	248	147	107	13	534	0.16%	
ANDENG TUNLE	<i>Plotosus canius</i>	0	0	507	0	0	8	515	0.15%	
CHRA KENG	<i>Puntius falcifer</i>	0	0	123	34	315	11	482	0.14%	
CHANTEAS PHLUK	<i>Parachela siamensis</i>	0	1	3	379	76	22	481	0.14%	
CHHVEAT	<i>Pangasius macronema</i>	1	4	186	99	81	108	479	0.14%	
KAMPOT	<i>Tetraodon spp.</i>	0	1	151	158	102	25	436	0.13%	
KES	<i>Micronema bleekeri</i>	0	0	252	155	10	0	417	0.12%	
KANHCHROUK	<i>Botia morleti</i>	0	0	47	124	202	32	405	0.12%	
CHHLONH	<i>Macrogathus siamensis</i>	0	11	233	55	81	14	394	0.12%	
KES PRAK	<i>Kryptopterus limpok</i>	0	82	267	0	4	0	353	0.10%	
KANHCHROUK	<i>Botia beauforti</i>	0	0	76	212	46	5	339	0.10%	
KRAY	<i>Chitala blanci</i>	0	0	0	29	303	0	332	0.10%	
CHANGWA MOUL	<i>Rasbora aurotaenia</i>	0	2	113	141	66	8	331	0.10%	
KAHE KRORHORM	<i>Barbodes alius</i>	0	0	274	31	14	10	329	0.10%	
PRA KANDOL	<i>Helicophagus waandersii</i>	0	2	166	75	81	1	324	0.10%	
PHKAR KOR	<i>Cirrhinus molitorella</i>	0	0	151	114	26	19	311	0.09%	

APPENDIX 2

Total Sale Price by Species by Months for *Dai Trey Linh*

Khmer name	Scientific name	Month						Total	
		Jul	Aug	Sep	Oct	Nov.	Dec.	Value	%
CHHPIN	<i>Hypsibarbus pierrei</i>	0	0	26	223	18	18	285	0.08%
CHHMAR	<i>Setipinna melanochir</i>	0	2	260	14	4	0	279	0.08%
CHANGWA CHUNCHUOK	<i>Crossocheilus reticulatus</i>	0	0	24	17	58	175	274	0.08%
KANHCHOS BAY	<i>Mystus albolineatus</i>	1	0	17	40	134	80	272	0.08%
ANDENG TUN	<i>Clarias macrocephalus</i>	0	16	2	16	93	130	257	0.08%
SRAKA KDAM	<i>Cyclocheilichthys lagleri</i>	0	0	15	11	42	177	245	0.07%
KANHCHOS	<i>Mystus singaringan</i>	1	0	147	45	32	13	237	0.07%
ANDENG TUN	<i>Clarias meladerma</i>	0	4	2	23	198	5	232	0.07%
ANGKAT PRAK	<i>Puntius aurotaeniatus</i>	0	1	2	99	2	121	225	0.07%
KHMAN	<i>Hampala macrolepidota</i>	24	0	96	14	56	31	222	0.07%
ANDAT CHHKE	<i>Synaptura marginata</i>	0	9	170	18	22	1	221	0.07%
KAMPHLIEVKHLANH	<i>Kryptopterus cryptopterus</i>	0	27	56	16	93	12	202	0.06%
PAVA MOKMUOY	<i>Labeo dyocheilus</i>	0	0	119	77	0	1	197	0.06%
CHHKOKTITUY	<i>Albulichthys albuloides</i>	0	0	164	1	24	3	192	0.06%
KROS	<i>Osteochilus basselii</i>	0	0	147	5	22	12	186	0.05%
KAMPHLIEV	<i>Kryptopterus hexapterus</i>	0	0	41	0	65	71	177	0.05%
CHHPIN PRAK	<i>Barbodes gonionolus</i>	0	13	135	24	0	0	172	0.05%
KRORMORM	<i>Ompok bimaculatus</i>	0	0	72	54	33	8	167	0.05%
ANTONG	<i>Monopterus albus</i>	0	0	37	111	5	2	155	0.05%
KANHCHROUK LOEUNG	<i>Botia lecorstei</i>	0	1	8	113	31	1	155	0.05%
PROR LUNG/CHRAWLANG	<i>Leptobarbus hoevenii</i>	0	0	111	35	2	6	153	0.05%
DAMREY	<i>Oxyeleotris marmorata</i>	0	0	0	105	25	21	151	0.04%
BANDOL AMPOAV	<i>Clupeichthys aesarnensis</i>	0	0	0	108	41	0	149	0.04%
KANHCHOS CHHNOT	<i>Mystus multiradiatus</i>	0	78	17	30	10	4	139	0.04%
ANGKAT PRAK	<i>Puntius brevis spp.</i>	0	2	35	31	20	41	129	0.04%
KHCHOUENG	<i>Macrognathus maculatus</i>	0	0	10	101	14	2	127	0.04%
CHANGWA NONONG	<i>Lobocheilos quadilineatus</i>	0	0	11	0	16	97	125	0.04%
KAMPHLEANH SAMREI	<i>Trichogaster trichopterus</i>	0	4	69	22	19	7	121	0.04%
KROS	<i>Osteochilus waandersii</i>	0	0	15	7	26	67	115	0.03%
KAMPHLIEV	<i>Kryptopterus schilbeides</i>	0	1	1	0	18	93	113	0.03%
KHSAN	<i>Channa gachua</i>	1	8	76	8	17	1	112	0.03%
KAMPHLIEV	<i>Kryptopterus moorei</i>	0	0	0	72	38	3	112	0.03%
KANHCHOS KDAONG	<i>Heterobagrus bocourti</i>	0	1	0	22	14	73	110	0.03%
KAMPEUS		0	0	1	9	79	12	101	0.03%
KROS	<i>Osteochilus microcephalus</i>	0	0	15	1	52	30	98	0.03%
TA AUN	<i>Wallago leerii</i>	0	0	16	66	14	2	97	0.03%
BANDOL SOK/SMOK	<i>Cyrinocheilus spp.</i>	0	0	42	20	26	6	95	0.03%
KANTRANG PRENG	<i>Parambassis wolffi</i>	0	0	0	13	74	3	90	0.03%
DANG KHTENG	<i>Macrochirichthys macrochirus</i>	0	0	38	40	3	2	83	0.02%
SLOEUK RUSSEY	<i>Paralauca barroni</i>	0	0	8	72	1	1	82	0.02%
KAMBOT CHRAMOS	<i>Amblyrhynchichthys truncatus</i>	0	0	0	2	50	23	75	0.02%
BANG KUOY	<i>Luciosoma bleekeri</i>	0	0	72	1	1	0	74	0.02%
CHHVEAT	<i>Pangasius polyuranodon</i>	0	3	43	5	4	11	66	0.02%
KAMPHLIEV STOEUNG	<i>Kryptopterus cheveyi</i>	0	2	8	5	38	11	63	0.02%
ANDAT CHHKE	<i>Cynoglossus puncticeps</i>	1	0	4	54	1	0	59	0.02%
KULREANG/KAHOR	<i>Catlocarpio siamensis</i>	0	0	5	32	20	0	57	0.02%
KE	<i>Pangasius conchophilus</i>	0	0	0	48	1	6	55	0.02%
PHTONG	<i>Xenentodon cancila spp.</i>	0	0	0	0	19	25	44	0.01%
PRAMA	<i>Boesemania microlepis</i>	0	0	0	0	35	0	35	0.01%
CHANGWA	<i>Rasbora myersi</i>	0	1	20	1	1	10	33	0.01%
ANDAT CHHKE	<i>Achiroides leucorhynchus</i>	0	0	12	17	0	2	31	0.01%
SRAKA KDAM	<i>Cyclocheilichthys repasson</i>	0	0	1	20	0	8	30	0.01%
SLOEUK RUSSEY	<i>Paralauca harmandi</i>	0	0	28	0	0	0	28	0.01%
SRAKA KDAM	<i>Cyclocheilichthys apogon</i>	0	0	1	7	8	10	26	0.01%
BANDOL AMPOAV	<i>Clupeichthys borneensis</i>	0	0	0	0	26	0	26	0.01%
ANDENG ROEUNG	<i>Clarias batrachus</i>	0	0	1	15	0	9	24	0.01%
ANDAT CHHKE	<i>Brachirus harmandi</i>	0	0	4	15	4	1	23	0.01%
KANHCHOS THMOR	<i>Leiocassis siamensis</i>	0	0	0	7	9	7	23	0.01%
KANHCHOS	<i>Mystus wolffi</i>	1	1	14	1	3	4	23	0.01%

APPENDIX 2

Total Sale Price by Species by Months for *Dai Trey Link*

Khmer name	Scientific name	Month						Total	
		Jul	Aug	Sep	Oct	Nov.	Dec.	Value	%
KROS	<i>Osteochilus lini</i>	0	1	20	0	3	0	23	0.01%
KANH CHANH CHRAS THOM	<i>Parambassis apogonoides</i>	0	3	9	8	1	0	21	0.01%
KANH CHANH CHRAS TOCH	<i>Parambassis siamensis</i>	0	0	8	5	1	6	21	0.01%
KUL CHEK	<i>Epalzeorhynchus frenatum</i>	0	0	1	10	2	7	20	0.01%
KAMPHEANH PHLUK	<i>Trit hogaster microlepis</i>	0	6	11	0	1	3	20	0.01%
PHKAR KOR	<i>Cylocheilichthys armalus</i>	0	0	2	16	1	0	19	0.01%
BANDOL AMPOAV	<i>clupeichthys goniognathys</i>	0	0	0	0	18	0	19	0.01%
CHANTEAS PHLUK	<i>Parachela williaminae</i>	0	0	3	8	3	2	15	0.0045%
SLOEUK RUSSEY	<i>Paralabuca riveroi</i>	0	0	10	3	0	0	13	0.0037%
CHANOWA PHLIENG	<i>Esomus longimana</i>	0	0	0	2	3	7	12	0.0034%
LOLORK SOR	<i>Osteochilus schlegeli</i>	0	0	10	0	2	0	11	0.0034%
CHANOWA NONONG	<i>Lobocheilos melanotaenia</i>	0	2	1	4	0	5	11	0.0033%
CHANGWA NONONG	<i>Lobocheilos davisii</i>	0	0	0	0	5	6	11	0.0031%
SLOEUK RUSSEY	<i>Oxygaster anomalura</i>	0	0	2	8	0	0	10	0.0028%
ANDAT CHHKE	<i>Brachirus orientalis</i>	0	0	8	1	1	0	9	0.0028%
ANTONG	<i>Ophisternon bengalense</i>	0	0	0	7	0	2	9	0.0028%
KANTHOR	<i>Trichogaster pectoralis</i>	0	0	6	3	0	0	9	0.0027%
CHANGWA CHHNOT	<i>Rasbora espei</i>	0	0	0	7	0	1	8	0.0024%
KAMPREAM	<i>Polynemus multijilis spp.</i>	0	0	0	0	7	1	8	0.0022%
CHANLUON MOAN	<i>Coilia lindmani</i>	0	1	2	1	2	2	7	0.0021%
CHANGWA	<i>Rasbora hobelmani</i>	0	0	2	3	0	0	6	0.0016%
CHANGWA CHHNOT	<i>Boraras urophthalmoides</i>	0	0	0	4	1	0	5	0.0016%
KANHCHORN CHEY	<i>Channa lucius</i>	0	0	5	0	0	0	5	0.0015%
PRA KHCHOA	<i>Pangasius bocourti</i>	1	0	4	0	0	0	5	0.0014%
ANDENG AFRIC	<i>Clartas gariepinus</i>	0	0	0	0	0	4	4	0.0012%
KRORMORM	<i>Hemistlurus mekongensis</i>	0	0	4	0	0	0	4	0.0012%
TRASORK	<i>Probarbus jullieni</i>	0	0	0	0	4	0	4	0.0012%
CHEK TUM	<i>Bagrichthys macracanthus</i>	0	0	0	0	1	2	4	0.0011%
CHHDOR/DIEP	<i>Channa micropeltes</i>	0	0	0	0	3	0	3	0.0010%
CARP SAMANH	<i>Cyprinus carpio</i>	0	0	0	1	1	1	3	0.0010%
KAOK	<i>Arius caelatus</i>	0	0	0	0	2	1	3	0.0009%
CHANLUON MOAN	<i>Coilia macrognathos</i>	0	0	0	0	0	2	2	0.0007%
CHANGWA CHHNOT	<i>Rasbora pavic'i</i>	0	0	0	0	2	0	2	0.0005%
KANHCHOS KRAWBEY	<i>Glyptothorax Justus</i>	0	2	0	0	0	0	2	0.0005%
KANHCHREA		0	1	0	0	0	0	1	0.0004%
KANHCHEAK SLA	<i>Toxoles chatareus</i>	0	0	0	1	0	0	1	0.0004%
KAOK	<i>Arius truncaus</i>	0	0	0	0	0	1	1	0.0003%
CHHKOK POKMOAT BEY	<i>Cylocheilichthys heteronema</i>	0	0	0	0	1	0	1	0.0003%
CHHPIN KRAHORM	<i>Hypsibarbus wettmorei</i>	0	0	0	0	1	0	1	0.0002%
KHLA /BEY KAMNAT	<i>Systemus partipentazona</i>	0	0	0	1	0	0	1	0.0002%
KAOK	<i>Hemipimelodus bicolor</i>	0	0	0	0	0	0	0	0.0001%
KAOK	<i>Hemipimelodus borneensis</i>	0	0	0	0	0	0	0	0.0001%
PO PRUY	<i>Pangasius sanitwongsci</i>	0	0	0	0	0	0	0	0.0001%
ANDAT CHHKE	<i>Brachirus panoides</i>	0	0	0	0	0	0	0	0.0001%
		282	1,400	213,377	92,964	21,200	8,971	338,194	100.0%

APPENDIX 3

Monthly average price for each species (Riel/kg)

Khmer name	Scientific name	Month						Weighted Average
		Jul	Aug	Sep	Oct	Nov.	Dec.	
RIEL TOB	<i>Cirrhinus siamensis</i>	500	411	784	656	581	545	763
RIEL AWNG KAM	<i>Cirrhinus lobatus</i>	288	383	544	655	715	515	743
ARCH KOK	<i>Labioharbus siamensis</i>		400	714	734	957	1,987	756
SLOEUK RUSSEY	<i>Paralaubuca typus</i>		400	612	620	401	548	611
CHHPIN	<i>Hypsibarbus malcolmi</i>			1,680	1,744	1,248	1,327	1,670
KES	<i>Micronema apogon</i>	2,417	3,611	3,439	3,678	3,328	1,300	3,105
PRUOL/KRALANG	<i>Cirrhinus microlepis</i>			779	739	486	587	756
KHNANG VENG	<i>Labioharbus kuhli</i>		314	503	861	434	200	626
ROS/PTUOK	<i>Channa striata</i>	2,000	747	3,123	1,646	2,615	2,577	2,498
CHRA KENG	<i>Puntiplites proctozysron</i>			1,647	1,832	476	578	1,090
ANDAT CHHKE	<i>Cynoglossus feldmanni</i>	500	881	811	1,683	1,090	1,334	1,145
PRA	<i>Pangasianodon hypophthalmus</i>		361	1,002	896	1,212	1,079	993
KHCHOEUNG	<i>Mastacembalus favus</i>	3,801	3,846	4,121	5,489	3,832	3,544	4,539
SANDAY	<i>Wallago attu</i>		2,000	2,714	640	2,500	2,610	2,694
CHHLANHG	<i>Hemibagrus spilopterus</i>	1,479	790	1,981	1,395	1,271	575	1,534
KANHCHROUK CHHNOT	<i>Botia helodes</i>		500	743	762	525	581	700
CHHPIN	<i>Hypsibarbus lagleri</i>			535	1,724	1,091	1,100	1,461
KRANH	<i>Anabas testudineus</i>	420	912	883	1,108	789	772	901
RUSCHEK	<i>Acanthopsoidea spp.</i>			518	1,912	2,111	906	1,964
KAEK	<i>Labeo chrysopekadion</i>		500	872	1,080	584	522	806
CHRA KENG	<i>Puntiplites waandersi</i>			795	878	596	545	630
SLAT	<i>Notopterus notopterus</i>			1,137	1,423	3,312	1,470	1,952
KHLANG HAI	<i>Belodontichthys truncatus</i>			1,255	1,647	1,835	1,235	1,519
AMPIL TUM	<i>Puntius orphoides</i>			843	538	1,120	962	835
CHHKOK	<i>Cyclocheilichthys enoplos</i>			1,622	706	557	872	1,031
CHANTEAS PHLUK	<i>Parachela maculicauda</i>			1,000	1,000	430		1,000
BANG KORNG	<i>Macrobrabrium rosenbergii</i>			3,357	4,455	5,145	5,064	4,562
KHMAN	<i>Hampala dispar</i>			1,105	1,629	3,587	930	1,417
KAHE LOEUNG	<i>Bar bodes schwanenfeldii</i>			1,243	1,345	641	667	1,230
LINH	<i>Thynnichthys thymoides</i>	250	809	651	609	708	660	650
CHHKOK PHEUNG	<i>Cyclocheilichthys furcatus</i>			2,370		990	1,700	2,335
TRANEL	<i>Hemibagrus filamentus</i>				3,000	4,955		3,644
PO	<i>Pangasius larnaudii</i>		600	1,296	1,119	1,797	822	1,278
KES	<i>Kryptopterus micronema</i>		3,857		2,400	4,150	3,750	3,842
KANHCHROUK KRAHORM	<i>Botia modesta</i>		598	339	911	466	521	680
KROM	<i>Osteochilus melanopleura</i>			1,394	1,288	530	2,862	1,162
KANTROB	<i>Pristolepis fasciata</i>			849	943	518	537	786
BANDOL AMPOAV	<i>Corica laciniata</i>			390	758	645	607	620
KHCHOUENG	<i>Macrognathus taeniagaster</i>			2,511	5,760	1,000		4,633
SLAT/KRAY	<i>Chitala lopis</i>				4,000	3,500	1,109	3,357
KRAY	<i>Chitala ornata</i>				2,907			2,907
KANHCHOS CHHNOT	<i>Mystus atrifasciatus</i>	250	726	836	820	506	495	760
KAMPOUL BAY	<i>Cosmochilus harmandi</i>			1,048	1,528	733	753	1,132
KANHCHOS CHHNOT	<i>Mystus myslicetus</i>		502	829	833	654	733	769
ANDENG TUNLE	<i>Plotosus canius</i>			3,000			2,600	2,993
CHRA KENG	<i>Puntiplites falcifer</i>			1,413	784	560	500	676
CHANTEAS PHLUK	<i>Parachela siamensis</i>		500	450	879	717	772	839
CHHVEAT	<i>Pangasius macronema</i>	304	290	900	749	754	1,385	885
KAMPOT	<i>Tetraodon spp</i>		267	399	555	1,112	600	551
KES	<i>Micronema bleckeri</i>			3,652	5,000	2,575		3,974
KANHCHROUK	<i>Botia morleti</i>			859	1,700	460	455	644
CHHLONH	<i>Macrognathus siamensis</i>		1,400	598	1,138	1,450	563	748
KES PRAK	<i>Kryptopterus limpok</i>		1,488	3,000		4,000		2,433
KANHCHROUK	<i>Botia beauforti</i>			473	788	639	1,000	669
KRAY	<i>Chitala blanci</i>				1,000	7,214		4,676
CHANGWA MOUL	<i>Rasbora aurotaenia</i>		480	665	651	700	521	660
KAHE KRORHORM	<i>Barbodes altus</i>			641	1,227	655	538	668
PRA KANDOL	<i>Helicophagus waandersii</i>		475	544	698	1,613	1,000	694

APPENDIX 3

Monthly average price for each species (Riel/kg)

Khmer name	Scientific name	Month						Weighted Average
		Jul	Aug	Sep	Oct	Nov.	Dec.	
PHKAR KOR	<i>Cirrhinus molitorella</i>	200		330	503	463	564	400
CHHPIN	<i>Hypsibarbus pierrei</i>			2,000	1,686	605	1,047	1,482
CHHMAR	<i>Setipinna melanochir</i>		440	1,000	907	888		984
CHANGWA CHUNCHUOK	<i>Crossocheilus reticulatus</i>		400	564	619	665	513	549
KANHCHOS BAY	<i>Mystus albolineatus</i>	268		508	778	741	756	726
ANDENG TUN	<i>Clarias macrocephalus</i>		4,000	1,000	2,055	2,102	1,970	2,072
SRAKA KDAM	<i>Cyclocheilichthys lagleri</i>			397	588	847	494	527
KANHCHOS	<i>Mystus singaringan</i>	357		1,000	990	1,179	542	968
ANDENG TUN	<i>Clarias meladerma</i>		4,000	1,000	1,353	3,094	1,270	2,637
ANOKAT PRAK	<i>Puntius aurotaeniatus</i>		200	300	517	460	570	536
KHMAN	<i>Hampala macrolepidota</i>	4,000	400	1,477	641	678	775	1,022
ANDAT CHHKE	<i>Synaptura marginata</i>		1,178	971	944	1,054	1,250	986
KAMPHLIEV KHLANH	<i>Kryptopterus cryptopterus</i>		491	619	978	1,240	958	819
PAVA MOKMUOY	<i>Labeo dyocheilus</i>			610	797		1,000	674
CHHKOK TITUY	<i>Albulichthys albuloides</i>			1,491	712	758	1,300	1,321
KROS	<i>Osteochilus hasseltii</i>			615	500	943	750	645
KAMPHLIEV	<i>Kryptopterus hexapterus</i>			706		662	852	739
CHHPIN PRAK	<i>Barbodes gonionotus</i>		1,000	750	2,200			844
KRORMORM	<i>Ompok bimaculatus</i>			1,640	1,930	2,054	975	1,738
ANTONG	<i>Monopterus albus</i>			558	3,000	5,000	2,000	1,466
KANHCHROUK LOEUNG	<i>Botia lecontei</i>		1,400	605	612	808	500	645
PROR LUNG/CHRAWLANG	<i>Leptobarbus hoevenii</i>			683	568	500	435	637
DAMREY	<i>Oxyeleotris narmorata</i>				2,757	2,476	2,343	2,642
BANDOL AMPOAV	<i>Clupeichthys aesarnensis</i>				761	583		702
KANHCHOS CHHNOT	<i>Mystus multiradiatus</i>		837	750	742	754	500	784
ANGKAT PRAK	<i>Puntius brevis</i> spp.		282	450	652	729	609	569
KHCHOUENG	<i>Macragnathus maculatus</i>			500	3,865	2,000	1,000	2,300
CHANGWA NONONG	<i>Lobocheilos quadrilineatus</i>			600		500	518	522
KAMPHLEANH SAMREI	<i>Trichogaster trichopterus</i>		475	567	535	643	607	570
KROS	<i>Osteochilus waandersii</i>			300	330	543	493	449
KAMPHLIEV	<i>Kryptopterus schilbeides</i>	300	260	450		708	539	553
KHSAN	<i>Channa gachua</i>	243	463	801	704	860	700	748
KAMPHLIEV	<i>Kryptopterus moorei</i>				979	706	625	856
KANHCHOS KDAONG	<i>Heterobagrus bocourti</i>		240		1,000	563	500	557
KAMPEUS				450	657	1,607	734	1,235
KROS	<i>Osteochilus microcephalus</i>			300	300	500	500	451
TA AUN	<i>Wallago leerii</i>			1,590	1,935	1,763	500	1,769
BANDOL SOK /SMOK	<i>Gyrinocheilus</i> spp.		200	737	784	674	786	722
KANTRANG PRENG	<i>Parambassis wolfjii</i>				764	1,270	990	1,149
DANG KHTENG	<i>Macrochirichthys macrochirus</i>			660	670	3,240	770	688
SLOEUK RUSSEY	<i>Paralauca barroni</i>			300	986	1,000	500	797
KAMBOT CHRAMOS	<i>Amblyrhynchichthys truncatus</i>				1,000	482	597	520
BANG KUOY	<i>Luciosoma bleekeri</i>			784	480	700		776
CHHVEAT	<i>Pangasius polyuranodon</i>	260	390	1,000	767	880	629	831
KAMPHLIEV STOEUING	<i>Kryptopterus cheveyi</i>		400	480	900	636	525	593
ANDAT CHHKE	<i>Cynoglossus punticeps</i>	459	410	300	588	750		551
KULREANG/KAHOR	<i>Catlocarpio siamensis</i>			525	857	883		818
KE	<i>Pangasius conchophilus</i>				1,043	1,000	1,375	1,069
PHTONG	<i>Xenentodon cancila</i> spp.					744	721	730
PRAMA	<i>Boesemania microlepis</i>		400			5,000		4,425
CHANGWA	<i>Rasbora myersi</i>		1,000	812	500	1,000	1,000	854
ANDAT CHHKE	<i>Achiroides leucorhynchus</i>			300	500	400	667	400
SRAKA KDAM	<i>Cyclocheilichthys repasson</i>			300	512		547	506
SLOEUK RUSSEY	<i>Paralauca harmandi</i>			448				448
SRAKA KDAM	<i>Cyclocheilichthys apogon</i>			300	433	834	500	531
BANDOL AMPOAV	<i>Clupeichthys borneensis</i>					490		490
ANDENG ROEUNG	<i>Clarias batrachus</i>			500	3,000		2,160	2,414
ANDAT CHHKE	<i>Brachirus harmandi</i>			330	500	527	500	460

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		Jul	Aug	Sep	Oct	Nov	Dec.	
KANHCHOS THMOR	<i>Leiocassis siamensis</i>				680	860	545	686
KANHCHOS	<i>Mystus wolffi</i>	500	405	1,000	800	508	500	724
KROS	<i>Osteochilus lini</i>		500	300		760		329
KANH CHANH CHRAS THOM	<i>Parambassis apogonoides</i>		431	600	911	1,000		663
KANH CHANH CHRAS TOCH	<i>Parambassis siamensis</i>			600	698	430	857	664
KUL CHEK	<i>Epalzeorhynchus frenatum</i>		400	800	559	500	440	505
KAMPHEANH PHLUK	<i>Trichogaster microlepis</i>		500	1,000		1,000	650	744
PHKAR KOR	<i>Cyclocheilichthys armatus</i>			300	429	400		408
BANDOL AMPOAV	<i>clupeichthys gonionathys</i>		300			444		440
CHANTEAS PHLUK	<i>Parachela williaminae</i>			300	480	400	500	422
SLOEUK RUSSEY	<i>Paralauca riveroi</i>			337	500			361
CHANGWA PHLIENG	<i>Esotus longimana</i>				500	530	500	507
LOLORK SOR	<i>Osteochilus schlegeli</i>				800	920		817
CHANGWA NONONG	<i>Lobocheilos melanotaenia</i>		210	300	500		595	409
CHANQWA NONONG	<i>Lobocheilos davisi</i>					926	839	875
SLOEUK RUSSEY	<i>Oxygaster anomalura</i>			300	750			565
ANDAT CHHKE	<i>Brachirus orientalis</i>			330	750	750		362
ANTONG	<i>Ophisternon bengalense</i>				1,057		2,000	1,175
KANTHOR	<i>Trichogaster pectoralis</i>			2,000	500		480	998
CHANGWA CHHNOT	<i>Rasbora espei</i>				500		1,000	533
KAMPREAM	<i>Polynemus multifiliis spp.</i>					1,120	830	1,079
CHANLUON MOAN	<i>Coilia lindmani</i>		400	450	714	767	750	593
CHANGWA	<i>Rasbora hobelmani</i>			300	500	400		393
CHANGWA CHHNOT	<i>Boraras urophthalmoides</i>				525	400		491
KANHCHORN CHEY	<i>Channa lucius</i>			1,000				1,000
PRA KHCHOA	<i>Pangasius hocourti</i>	293	200	488				426
ANDENG AFRIC	<i>Clarias gariepinus</i>						2,000	2,000
KRORMORM	<i>Hemilurus mekongensis</i>			2,000				2,000
TRASORK	<i>Probarbus jullieni</i>					2,000		2,000
CHEK TUM	<i>Bagrichthys macracanthus</i>		400			1,000	1,100	900
CHHDOR/DIEP	<i>Channa micropeltes</i>					575		575
CARP SAMANH	<i>Cyprinus earpio</i>				700	550	430	540
KAOK	<i>Arius caelalus</i>					1,000	1,000	1,000
CHANLUON MOAN	<i>Coilia macrognathos</i>		370				400	395
CHANGWA CHHNOT	<i>Rasbora paviei</i>					900		900
KANHCHOS KRAWBEY	<i>Glyptothorax fuscus</i>		600					600
KANHCHREA			1,330					1,330
KANHCHEAK SLA	<i>Tuxotcs chatareus</i>		450		800			625
KAOK	<i>Arius truncatus</i>						1,000	1,000
CHHKOK POKMOAT BEY	<i>Cyclocheilichthys heteronema</i>					930		930
CHHPIN KRAHORM	<i>Hypsibarbus wetmorei</i>					400		400
KHLA /BEY KAMNAT	<i>Systomus partipentazona</i>				700			700
KAOK	<i>Hemipimelodus bicolor</i>		400					400
KAOK	<i>Hemipimelodus borneensis</i>		400					400
PO PRUY	<i>Pangasius sanitwongsei</i>		400					400
ANDAT CHHKE	<i>Brachirus panoides</i>		390					390