

AGENCY FOR AGRICULTURAL RESEARCH AND DEVELOPMENT

RESEARCH INSTITUTE FOR MARINE FISHERIES



**JAVA SEA PELAGIC FISHERY
ASSESSMENT PROJECT
(ALA/INS/87/17)**

**BIG PURSE SEINERS FISHERY
STATISTICAL COLLECTION
YEAR 1990**

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- Tegal : Ir. Samtoro Putro
- Pekalongan : Mr. Sugiarto.
- Batang : Mr. Siswanto Ngali
- Pati : Mr. Ali Mulyono.
- Rembang : Mr. Koenarno

Fishing Harbour of Pekalongan.

- Head of the harbour : Mr. Oeloenggono.
- Head of the management and development section : Mr E.W. Pay
- Head of auction sub-section : Mr. Haryono.

T.P.I. Managers.

- Pekalongan : Mr. Kisbadi.
- Batang : Mr. Bambang Irianto.
- Juwana : Mr. Soesiyanto

Surveyors

- Tegal : Mr. Maali Effendi.
- : Mr. Burhanudin.
- Pekalongan : Mr. Sukardi.
- : Mr. Abdul Ngasis.
- Juwana : Mr. Minggu
- : Mr Sutrisno
- : Mr. Suwarno

PRESENTATION

This paper compiles all the statistical data of the year 1990 concerning the big purse - seiners fishery which extends along the northern coast of the Java island (Fig. 1) in the Central Java Province.

Collected in the main landing places of that province (Fig. 2) with the different administrations (T.P.I. Administrations, Fisheries services and Security Services), they are, then, processed and synthesized by the scientific team working on the project "Java Sea Pelagic Fishery Assessment project"

A serie of notes presents the vessels, this fishery, the documents available and the methodology used for this study (see chapter V).

The data are gathered per chapter which correspond to the main components of the fishery.

- I. The catches.
- II. The effort.
- III. The C.P.U.E. (Catch per unit effort)
- IV. The fleet.
- V. References.

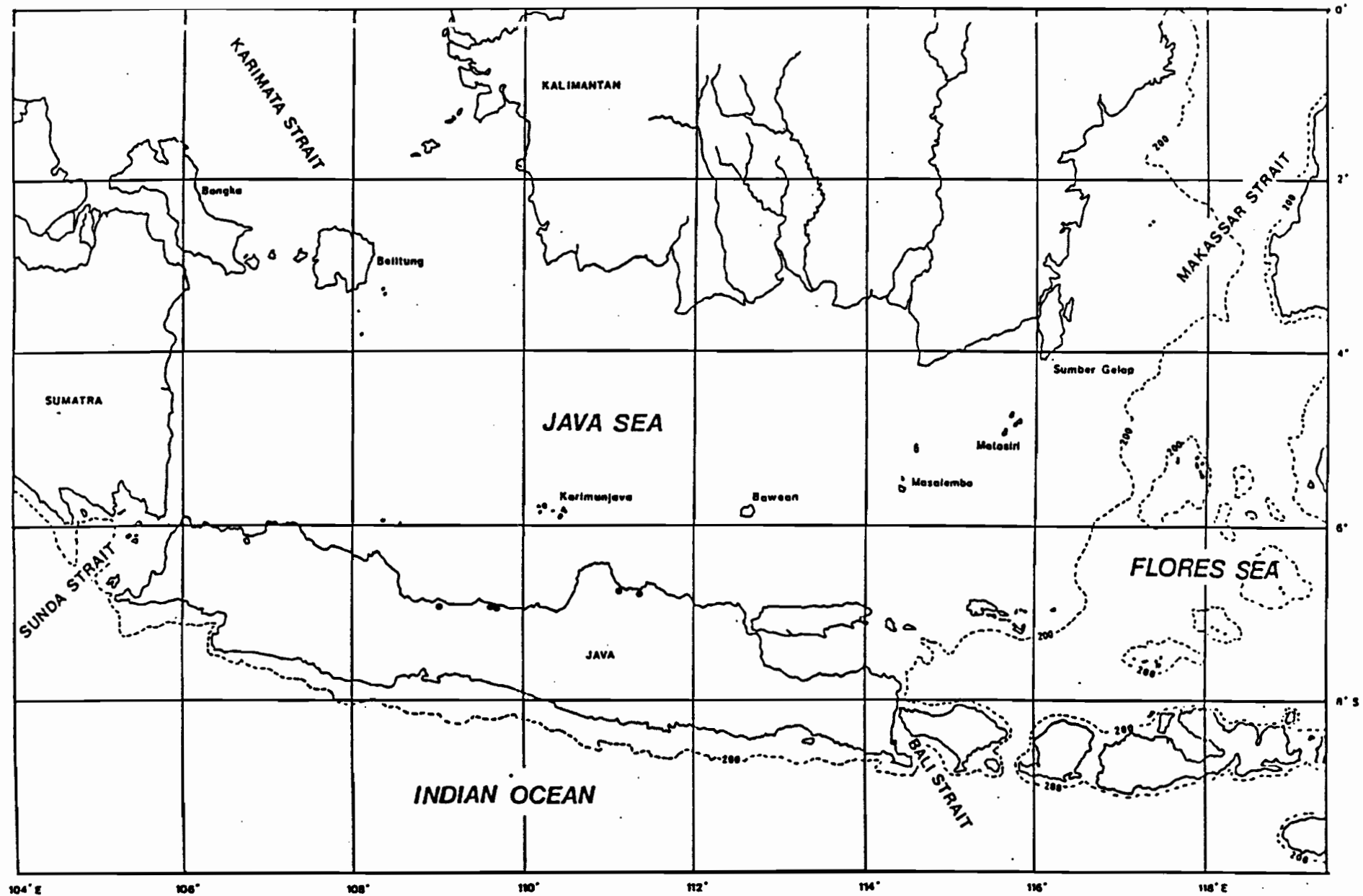


Fig.1 - Location of the Java Sea in the Indonesian Archipelago.

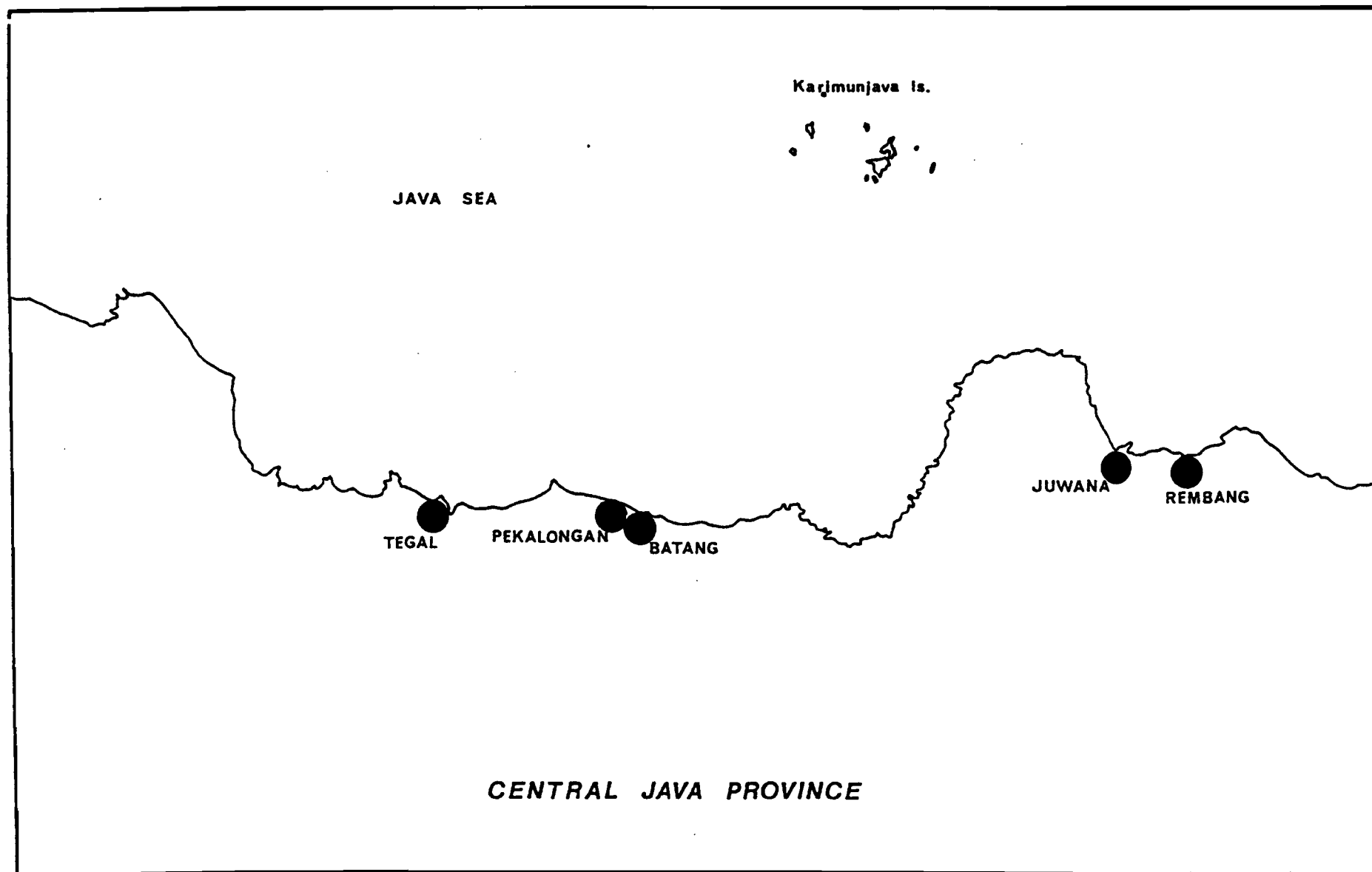


Fig. 2 - Location of the landing places used by the Javanese "big" purse seiners.

THE CATCHES

The data are produced by main commercial category and for each harbour where land the vessels. The values are expressed in tons.

- Annual catch by main commercial category in the Central Java Province. Big purse seiners. 1990.
- Monthly total catch in each harbour.
- Monthly catch of Layang (Decapterus spp.) in each harbour.
- Monthly catch of Banyar (Rastrelliger kanagurta) in each harbour.
- Monthly catch of Selar (Selar spp. and Selaroides leptolepis) in each harbour.
- Monthly catch of Bentong (Selar crumenophthalmus) in each harbour.
- Monthly catch of Tanjan (Sardinella gibbosa and Sardinella fimbriata) in each harbour.
- Monthly catch of Lemuru (Amblygaster sirm) in each harbour.

	Banyar	Bentong	Layang	Lemuru	Selar	Tanjan	Others	Total
1990	10020	5318	50953	7593	681	6725	5470	86760

Annual catch by main commercial category in the Central Java Province. Big purse seiners. 1990.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	635	612	411	698	357	1033	1204	1322	1523	1847	1593	1833	13068
Pekalongan	2576	3157	2301	1713	12006	2839	3455	3443	5438	6818	6416	6095	46257
Batang	29		1	8	2	8	1	4	10	379	255	218	915
Juwana	2300	1191	582	561	491	1380	1353	2303	3177	4474	4426	4282	26520
Total	5540	4960	3295	2980	12856	5260	6013	7072	10148	13518	12690	12428	86760

Monthly total catch in each harbour. Tons.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	324	265	176	362	279	717	857	1045	1006	782	713	569	7095
Pekalongan	1666	1572	1237	687	1169	2188	2152	2264	3937	4066	3982	2713	27633
Batang	15		1	5	9	4	1	1	5	73	89	80	283
Juwana	1487	593	313	225	286	1064	843	1510	2300	2668	2747	1906	15942
Total	3492	2430	1727	1279	11743	3973	3853	4820	7248	7589	7531	5268	50953

Monthly catch of *Layang* (*Decapterus spp.*) in each harbour. Tons.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	104	115	79	83	36	38	56	52	134	231	216	327	1471
Pekalongan	206	354	215	269	145	155	233	278	609	951	904	942	5261
Batang	8		1	3	1		1	1	4	25	73	58	175
Juwana	184	134	54	88	35	75	91	185	357	624	624	663	3113
Total	502	603	349	443	217	268	381	516	1104	1831	1817	1989	10020

Monthly catch of Banyar (Rastrelliger kanagurta) in each harbour. Tons.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	46	90	75	80	27	118	73	68	94	72	176	346	1265
Pekalongan	165	320	380	225	80	133	206	202	261	189	257	221	2639
Batang	3					1					34	29	67
Juwana	147	121	96	74	20	65	81	135	152	124	177	155	1347
Total	361	531	551	379	127	317	360	405	507	385	644	751	5318

Monthly catch of Bentong (Selar crumenophthalmus) in each harbour. Tons.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	19	38	21	25			12	1	11	23	17	12	179
Pekalongan	21	58	77	57	10	19	26	32	9	5	3	27	344
Batang	1										1	3	5
Juwana	19	22	19	19	3	10	10	22	5	3	2	19	153
Total	60	118	117	101	13	29	48	55	25	31	23	61	681

Monthly catch of Selar (Selar spp. and Selaroides leptolepis) in each harbour. Tons.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	9	16	11	40	4	35	61	29	69	232	151	107	764
Pekalongan	165	173	146	153	465	200	575	350	309	556	369	420	3881
Batang				1	1	3		1	1	126			133
Juwana	30	65	37	50	114	97	225	233	181	365	255	295	1947
Total	204	254	194	244	584	335	861	613	560	1279	775	822	6725

Monthly catch of Tanjan (Sardinella gibbosa and Sardinella fimbriata) in each harbour. Tons.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	105	51	7	26		5	26	20	31	178	171	338	958
Pekalongan	421	542	98	100	9	27	240	239	139	425	420	1330	3990
Batang							1			88	27	40	156
Juwana	376	204	25	33	2	13	94	159	81	279	289	934	2489
Total	902	797	130	159	11	45	361	418	251	970	907	2642	7593

Monthly catch of Lemuru (Amblygaster sirm) in each harbour. Tons.

THE EFFORT

The data are expressed for each harbour according to the best definitions of that value for this purse - seine fishery : number of trips and days at sea.

- Monthly effort, expressed in number of trips for each harbour.
- Monthly effort, expressed in days at sea for each harbour.
- Monthly mean number of days at sea by trip for each harbour.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	38	43	49	50	15	36	31	29	46	52	46	45	480
Pekalongan	92	146	189	146	82	128	129	130	163	159	152	152	1668
Batang	6		1	4	3	5	2	3	3	31	24	18	100
Juwana	71	44	40	32	14	46	47	79	90	101	105	96	765
Total	207	233	279	232	114	215	209	241	302	343	327	311	3013

Monthly effort : number of trips in each harbour.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	515	688	903	1080	424	725	903	940	1070	1059	872	950	10129
Pekalongan	2608	3793	5180	3451	11732	3466	3910	3712	4253	2902	2565	2899	40471
Batang	66	0	10	64	31	58	20	45	48	324	257	204	1127
Juwana	1747	1110	1120	651	217	1058	1231	1884	1689	1895	1673	1922	16197
Total	4936	5591	7213	5246	12404	5307	6064	6581	7060	6180	5367	5975	67924

Monthly effort : Days at sea in each harbour.

	January	February	March	April	May	June	July	August	September	October	November	December
Tegal	14	16	18	22	28	20	29	32	23	20	19	21
Pekalongan	28	26	27	24	21	27	30	29	26	18	17	19
Batang	11		10	16	10	11	10	15	16	10	11	11
Juwana	25	25	28	20	15	23	26	24	19	19	16	20

Monthly mean number of days at sea by trip in each harbour.

THE C.P.U.E.

This part includes only one table :

- Monthly Catch Per Unit Effort (C.P.U.E.) of the "big" purse seiners for each harbour. (Kg/Day at sea).

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Tegal	1233	889	455	646	842	1425	1333	1406	1423	1744	1827	1929	1290
Pekalongan	988	437	444	496	1158	819	884	928	1279	2349	2501	2102	1143
Batang	438		110	129	79	137	58	89	212	1170	992	1070	812
Juwana	1316	1073	520	862	2262	1305	1099	1222	1881	2361	2645	2228	1637
Total	1122	887	457	568	1188	991	992	1075	1437	2187	2364	2080	1278

Monthly Catch Per Unit Effort (C.P.U.E.) of the "big" purse seiners in each harbour. (Kg/Day at sea).

THE FLEET

Structure and activity

This part is divided in three sub-chapters.

- The first one presents per place of registration the main characteristics (horse power, gross tonnage year of shipbuilding) of the "big" purse seiners.
- The second one presents per place of registration the monthly number of trips and the number of months in activity for each purse seiner.
- The third one gathers five tables which respectively present :
 - Number of vessels registered in the different landing places and which achieved at least one trip during the year.
 - Monthly number of purse seiners working in each harbour.
 - Monthly number of purse seiners landing in each harbour.
 - Monthly number of purse seiners landing in the harbour of its registration.
 - Monthly number of purse seiners which land in an harbour where it is not registered.

Vessel name	HP	GT	YE	Vessel name	HP	GT	YE	Vessel name	HP	GT	YE
Bahtera jaya	160	32.1	81	Kartika jaya	160	32.1	82	Safir alam	150	34.5	82
Berlian jaya	160	35.1	85	Karunia jaya	160	33.1	87	Safir alam 1	160	34.5	82
Bintang anugerah	160	31.4	86	Maju jaya	160	34.6	87	Safir alam 2	160	34.5	82
Bintang fajar	160	34.7	82	Mandoliko	160	31.5	87	Safir alam 4	160	34.9	86
Bintang kurniawan	160	32.4	87	Mandoyo	160	32.0	82	Sari laut	160	34.5	86
Bintang mutiara	160	33.9	86	Mina harapan	160	33.5	85	Sarina mulia	160	34.4	87
Bintang samodra	160	30.6	86	Mina harapan B	160	34.5	86	Sejahtera makmur	160	28.5	85
Dedali	160	29.2	84	Moro mino	160	35.0	82	Senja harapan	160	34.4	83
Dunia aji	160	35.2	86	Mutiara abadi	160	31.3	90	Serbah indah	160	35.1	82
Eben haezer	160	31.2	86	Mutiara berlian	160	34.4	90	Sumber abadi	160	33.7	87
Gema jaya	160	34.2	86	Mutiara jaya	160	34.4	85	Sumber mas	120	28.1	82
Halindo jaya	160	31.5	88	Naga mas	160	32.9	87	Sumber mas harto	160	33.8	86
Harapan baru	160	33.8	90	Nelayan maju	160	31.2	86	Sumber mas jaya	160	33.7	83
Harapan jaya	160	31.5	89	Pelangi	160	34.8	85	Sumber rejeki	160	35.3	82
Harapan maju	160	34.8	86	Perintis jaya makmur	120	31.3	85	Susanto	120	27.8	80
Ikan mas 2	160	30.0	82	Perwira jaya	120	35.2	82	Talita kummi	160	31.5	90
Imam aulia	120	33.0	80	Pranolo	160	30.0	83	Tambah jaya	120	29.9	82
Jasa mina baru	160	31.3	86	Putra harapan	160	35.0	82	Taufik	160	34.5	82
Jaya abadi	160	31.3	85	Putra sejati	120	29.2	80	Teguh jaya	160	34.5	85

** : No data.

HP : Horse power. GT : Gross tonage. YE : Year of shipbuilding.

Characteristics of the purse seiners registered in Tegal. N= 57.

Vessel name	HP	GT	YE	Vessel name	HP	GT	YE	Vessel name	HP	GT	YE
Abimanju	200	31.6	86	Berkah utama	160	31.5	85	Nurni sari	160	89.8	87
Anugerah jaya	160	32.8	83	Haiteri baru	160	31.8	85	Perdana	160	32.3	82
Assaudah baru 1	100	28.1	79	Hak nusantara indah	160	43.1	84	Sumber harapan	160	27.9	78
Assaudah baru 2	160	34.1	85	Indah lestari	160	31.3	84	Tirta kencana	150	20.0	78
Berkah lestari	120	20.1	85	Mina lestari	120	31.9	80	Utama jaya	120	22.8	80

** : No data.

HP : Horse power. GT : Gross tonage. YE : Year of shipbuilding.

Characteristics of the purse seiners registered in Batang. N= 15.

Vessel name	HP	GT	YE	Vessel name	HP	GT	YE	Vessel name	HP	GT	YE
Indah jaya makmur	160	31.8	85	Santa lucia	120	30.0	76	Satria sakti	120	30.0	85
Mina graha	120	30.0	88	Satria baru	120	28.0	77	Sinar mutiara	160	42.0	86
Mustika jaya	160	41.0	79	Satria muda	160	31.6	84				
Nusa indah	100	27.0	77	Satria perkasa	120	64.0	86				

** : No data.

HP : Horse power. GT : Gross tonage. YE : Year of shipbuilding.

Characteristics of the purse seiners registered in Rembang. N= 10.

Vessel name	HP	GT	YE	Vessel name	HP	GT	YE	Vessel name	HP	GT	YE
A. Podo Rukun	160	31.1	85	Jayakarta	160	31.6	86	Remaja 1	160	32.2	85
Agung makmur	160	31.2	85	Jaya wijaya	160	31.3	87	Remaja abadi	160	31.0	84
Andalas	160	31.6	85	Jitu utama	160	31.8	85	Remaja makmur	160	33.4	83
Andromeda	160	30.9	83	Jitu wahid	160	34.2	84	Rukun utama	120	28.6	79
Anggoro kasih	160	31.1	85	Kalimas 1	120	28.6	80	Sahabat baru 2	160	31.5	85
Anta bahagia	160	31.4	78	Kalimas indah A	160	31.4	83	Samodra adiguna 2	160	63.6	86
Anta wibawa	160	33.3	83	Karya samudra 1	160	31.2	86	Samodra hindia	160	31.5	87
Antartika	160	34.7	83	Karya samudra 2	160	32.4	87	Samodra luas	120	31.4	86
Anugerah jaya	160	**	89	Ketapang jaya 3	**	**	**	Samodra makmur	160	32.1	84
Apel indah	160	31.2	89	Laju lancar jaya 2	160	31.1	85	Samodra pasifik	160	31.5	87
Apel putih A.	160	31.3	84	Laksamana	160	31.3	84	Samodra perdana	160	31.8	84
Arabika	160	31.3	85	Laksana berkah B	160	30.1	87	Sampurna baru	160	32.0	87
Armada jaya 2	160	31.6	84	Laksana jaya	160	29.8	85	Sari lancar	160	31.1	85
Bahtera kasih	160	31.0	84	Langgeng jaya	160	35.1	**	Sari rejeki	160	31.3	87
Banyu urip A	160	31.8	85	Langsung jaya	160	31.8	84	Sekawan indah	160	31.7	85
Bara mustika	160	31.6	85	Langsung jaya A	160	31.1	85	Senyum bahagia	160	33.9	84
Berhasil 1	160	31.1	85	Langsung jaya abadi	160	31.8	87	Senyum harapan	120	31.2	84
Berhasil 2	160	31.7	85	Langsung jaya B	160	31.1	86	Senyum makmur	160	31.6	86
Beringin jaya 1	160	33.1	83	Maha putra	160	32.5	85	Seruni sari	160	31.2	84
Beringin jaya 2	160	33.9	84	Makin subur	160	31.6	86	Setia maju	160	31.2	86
Beringin jaya 3	160	34.2	84	Makmur abadi	160	31.7	79	Setia makmur	160	32.0	87
Beringin jaya 4	160	30.8	84	Margo utama	160	31.3	84	Sinar makmur	160	31.9	85
Beringin jaya 5	160	31.8	84	Megah abadi	160	31.5	86	Sinar manunggal abadi	160	31.4	88
Beringin jaya 6	160	31.9	84	Megah harapan	160	31.6	85	Sinar perdana	160	32.4	85
Beringin jaya 7	160	31.6	85	Megah indah	160	31.3	87	Sinar samodra 1	160	31.4	85
Beringin jaya 8	160	31.3	86	Megah jaya	160	31.3	86	Sinar slamet	**	29.5	86
Bhineka	160	31.2	84	Megah raya	120	27.2	79	Slamet agung	160	31.6	85
Bima sakti A	160	31.3	86	Mekar gloria makmur	160	31.4	84	Slamet untung	160	31.2	85
Bima sakti B	160	31.3	84	Mekar wijaya	160	31.4	86	Soyo abadi	160	31.5	87
Bima sakti D	160	31.1	86	Mekar wijaya makmur	160	31.9	84	Soyo agung	160	31.5	85
Bina karya	160	30.6	83	Mina abadi	280	31.3	88	Soyo agung 2	160	31.3	85
Bina ria	160	34.0	83	Mina baruna	160	31.2	85	Soyo agung 3	160	31.5	86
Bintang abadi	160	31.6	86	Mina harapan	160	31.2	78	Sri kandi	160	31.2	84
Bintang bahari	160	31.5	86	Mina indah	160	32.2	87	Sri surya	100	31.1	84
Bintang flores	160	31.6	87	Mina jaya 1	160	25.1	85	Sukses	160	31.3	85
Bintang makmur	160	31.2	86	Mina karya	160	30.5	84	Sukses bahagia	160	31.1	82
Bintang mas	160	31.5	87	Mina makmur	160	31.6	83	Sumber daya makmur	160	31.5	86
Bintang murni	160	31.1	87	Mina mastana	160	31.3	86	Sumber harapan	160	28.4	85
Bintang mustika	160	31.3	85	Moro mino baru	160	31.5	85	Sumber harjo	120	19.4	79
Bintang nasional	160	31.5	87	Muda hasil	160	31.3	86	Sumber harjo A	120	33.0	83
Bintang nelayan	160	31.7	87	Mustika sejati	160	29.7	86	Sumber harjo B	160	34.1	83
Bintang pasifik	160	31.6	86	Mutiara indah	160	31.1	87	Sumber indah	160	31.4	86
Bintang perdana	160	31.5	87	Naga mas	160	31.2	83	Sumber manggis 1	120	31.4	85
Bintang prima	160	31.1	85	Neptunus	160	32.8	89	Sumber terang	160	31.6	86
Bintang remaja	160	32.3	84	Panca mas 1	160	31.3	86	Surya indah	120	31.5	84
Bintang slamet	160	31.3	85	Pandu 1	120	28.0	80	Surya makmur	160	33.8	84
Bintang timur	160	28.6	79	Para putra jaya	160	31.4	80	Surya wijaya	160	31.0	85
Bintang united	160	31.5	87	Paringi jaya	160	31.1	86	Susanto I	160	32.5	88
Bintang wijaya	160	32.5	87	Pekalongan indah	160	31.3	86	Syailendra	160	33.8	84
Caraka	160	32.9	86	Pelangi kasih	160	31.3	86	Teguh harapan	160	31.4	88

** : No data.

HP : Horse power. GT : Gross tonnage. YE : Year of shipbuilding.

Characteristics of purse seiners registered in Pekalongan. N= 224.

Vessel name	HP	GT	YE	Vessel name	HP	GT	YE	Vessel name	HP	GT	YE
Charly indah	160	29.7	80	Pelita jaya	160	31.7	87	Teguh harapan jaya	160	31.4	88
Charly mina jaya	160	32.3	85	Pelita makmur	160	34.9	90	Teguh jaya	160	31.7	86
Charly tirta jaya	160	31.5	85	Pelita sejati	160	31.3	88	Teguh makmur	160	31.6	88
Charly wijaya 2	160	33.5	84	Pelopor maju	160	32.3	85	Teguh sejati	240	33.3	89
Citra mustika	160	63.1	86	Perintis makmur	160	31.2	83	Tirta abadi	160	31.4	85
Citra samodra	160	32.5	85	Perintis perkasa	180	31.7	87	Tirta katulistiwa farming	160	31.3	87
Daya bintang timur	160	31.5	87	Perintis sejahtera	160	33.7	83	Tirta makmur	160	33.9	83
Daya samodra	160	34.2	86	Pertiwi	160	31.2	83	Tri mina jaya	160	30.3	85
Delapan karya mina	120	22.3	84	Profit	160	31.2	85	Trimurti	160	31.4	86
Dwi manunggal jaya	160	33.9	84	Prosper	160	33.1	89	Tri sejati	160	31.2	88
Gabungan jaya abadi	160	31.1	85	Pulau seribu	240	**	90	Tujuh-Tujuh	160	31.4	85
Gabungan jaya baru	160	31.2	85	Puncak harapan	160	31.3	87	Tunas karya	160	34.8	83
Garuda jaya	160	32.1	87	Pustaka abadi	160	31.3	84	Tunas harapan	120	31.3	85
Haitri jaya A	160	31.7	86	Putra bungsu	160	31.1	88	Udayana	160	31.3	86
Haitri jaya 2	**	**	**	Putra harapan	160	31.2	85	Union abadi	160	31.7	88
Harapan makmur	160	31.5	86	Putra karya	160	33.4	83	Union harapan	160	31.6	87
Harapan mustika	160	31.1	86	Putra manunggal jaya	160	31.7	85	Union jaya	160	33.1	86
Haryanto I	160	31.3	87	Putra manunggal makmur	160	31.4	86	Union jaya abadi	160	31.4	87
Holy jaya	160	31.3	83	Putra pasifik	160	31.5	86	Union makmur	160	32.8	88
Horison	160	27.5	79	Putra remaja baru	160	21.1	85	United jaya	160	29.7	85
Indah harapan	160	34.7	85	Putra samodra	160	34.1	84	Venus	160	31.2	86
Indah wijaya	160	31.1	86	Putra setia	160	33.2	83	Wira buana	160	31.6	86
Inti makmur	160	31.2	84	Putra sulung	160	31.1	86	Yupiter	160	31.2	85
Irwan I	160	29.8	87	Putra wijaya	120	26.7	79	Yustitia	160	31.6	87
Jawa indah	160	31.7	87	Ramayana	160	31.3	85				

** : No data.

HP : Horse power. GT : Gross tonnage. YE : Year of shipbuilding.

Characteristics of purse seiners registered in Pekalongan. N= 224.

Vessel name	HP	GT	YE	Vessel name	HP	GT	YE	Vessel name	HP	GT	YE
Along jaya	160	34.4	85	Margo jaya	220	31.6	79	Mustika sakti	100	21.5	81
Banyu urip 2	160	32.2	83	Margo lestari	320	35.2	88	Panca harapan	120	33.2	81
Banyu urip B	160	31.2	**	Margo makmur	320	33.5	84	Perwira sakti	160	32.0	85
Berkah jaya 2	160	20.0	84	Margo mukti	150	32.7	86	Putra remaja	160	33.9	84
Bima samodra	100	33.5	80	Margo mulyo	150	32.6	85	Sarono mino 1	160	31.8	87
Gondo mino	160	31.2	83	Margo rahayu	320	34.1	84	Satria	120	21.6	79
Jaya agung	160	34.2	84	Margo sejati	320	34.0	89	Theresia	160	31.6	86
Jaya sentosa	160	31.6	75	Margo sentosa	320	31.1	87	Tunas wibawa	90	21.2	78
Kartika sakti	160	31.7	81	Margo waluyo	250	**	90	Wijaya sakti	160	28.1	83
Kintamani	160	31.4	86	Mina raya	250	**	87	Yallasena	120	28.3	79
Makin maju	160	32.1	85	Mustika indah	160	33.2	82				

** : No data.

HP : Horse power. GT : Gross tonnage. YE : Year of shipbuilding.

Characteristics of the purse seiners registered in Juwana. N= 32.

Port	Characteristic	HP	GT	Age
Tegal		155	32.8	5
Pekalongan		159	31.7	5
Batang		150	33.9	7
Juwana		182	30.8	6
Rembang		134	35.5	8

* No Data.

Average characteristics of the big purse seiners per port of registration in 1990.

Port	D	S	N	x
Tegal	5	2	9	2
Pekalongan	19	5	14	-10
Batang	4	0	1	-3
Jepara	0	1	0	-1
Juwana	7	1	4	-4
Rembang	1	0	1	0

D : Disappear. S : Sold. N : New.

Evolution of the flottillas in each port during 1990.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Bahtera jaya		1	1	1	1		1		1		1	1		8	8
Berlian jaya		1		1	1	1		1	1	1			1	9	9
Bintang anugrah		1		1	1		1	1	1		1		1	8	8
Bintang fajar		1		1	1			1	1	2		1	2	10	8
Bintang kurniawan			1		1		1	1		1	1	1	1	8	8
Bintang mutiara				1	1		1	1	1	1		1	2	9	8
Bintang samudra		1		1	1		1	1		1	1	1	1	9	9
Dedali		1		1	1			1	1	1	1	2	1	10	9
Dunia aji		1		1	1		1	1		1	1			7	7
Eben haezer		1	1	1	1		1		1	2	1		1	10	9
Gemah jaya			1	2		1		1	1	2		1	1	10	8
Halindo jaya		1		1	1		1	1		1			1	7	7
Harapan baru													1	1	1
Harapan jaya		2			2		1	1	1		1	1	1	10	8
Harapan maju		1			1	1	1		1		1	1	1	8	8
Ikan mas 2				1										1	1
Imam aulia		2	2	1	2		1							8	5
Jasa mina baru			1		1	1		1		2	1	1	1	9	8
Jaya abadi		1		1			1	1		2	1	1	1	9	8
Kartika jaya		1	2	1	2					1	1			8	6
Karunia jaya			2	1	1		2		1	1	1		1	10	8
Maju jaya		1		1	1		1	1	1		1	1		8	8
Mandoliko		2		1	1		1	1			1	1	1	9	8
Mandoyo			1	1										2	2
Mina harapan			2	3		1	1		1		1	1	1	11	8
Mina harapan B		1				1	1	1						5	5
Moro mino		1		1			1		1	1	1			7	7
Mutiara abadi				1		1		1	1	1	1	1	1	8	8
Mutiara berlian						1		1	1	1	1	1	1	6	6
Mutiara jaya		1		1	1	1	1	1		1	1	1	1	10	10
Naga mas			1	1	1	1	1	1	1	1	2	1	1	11	10
Nelayan maju			1		1		1		1		1	1	1	7	7
Pelangi			1		1			1	1	1	1	1	1	8	8
Perintis jaya makmur		1		1	1		1	1	1		2	1	1	10	9
Perwira jaya		2	2		1		1	1		1				8	6
Pranolo		1	1	1	1	1			1	1				7	7
Putra harapan		2	2	1	1	1	1							8	6
Putra sejati		1	2	1	2					2				8	5
Safir alam			3	1	1		1			1	2	3	2	14	8
Safir alam 1		1	2	2	1	1			2	1	1	2	2	15	10
Safir alam 2		2	1	4	1				1	1	1	1		12	8
Safir alam 4		1		1							1		2	5	4
Safir alam 5				1										1	1
Sari laut		1		1	1			1	1	1	1		1	8	8
Sarina mulya		1					1	1		2			1	6	5
Sejahtera makmur		1			1		1		1	1		1		6	6
Senja harapan						1	1	1			2	2	1	8	6

Na : Number of month in activity. To : Total number of trips.

Monthly number of trips per vessel registered in Tegal Harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Serbah indah		1	2	1	1	1	1	1	1	1	2	2	1	15	12
Sumber abadi			1		1		1	1	1	1	2	1	2	11	9
Sumber mas		1			1	1		2	1	1	1			8	7
Sumber mas harto		1	1								1			3	3
Sumber mas jaya		1		1	2	1				1	1			7	6
Sumber rejeki		1	3	1	1		1	1		1				9	7
Susanto			1		1		1		1	1	1	1	1	8	8
Talita kummi							1		1		1		1	4	4
Tambah jaya		2	2	2	1					2	1	2	1	13	8
Taufik		1	3	2	1					1	1	1	2	12	8
Teguh jaya			1		1	1		1	1	2	1		2	10	8

Na : Number of month in activity. To : Total number of trips.

Monthly number of trips per vessel registered in Tegal Harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Abi manju					1			1	1		1		1	5	5
Anugerah jaya		1			1		2			1	1	2		8	6
Assaudah baru 1			2		1	1	1	1	2	2	1	2	1	14	10
Assaudah baru 2		1	1	1	1	1	1		1	1	2	2	2	14	10
Berkah lestari		1	2	1	1	1								6	5
Berkah utama		1		1		1							1	4	4
Haiteri baru			1	1	1	1			1		2	1	2	10	8
Hak nusantara indah		1	2	2	1	1	1		1	1	1	1	1	13	11
Indah lestari		1	2	2	1		2		1	2	2	1	2	16	10
Mina lestari		2	2	1	2	1	1		1	2	2	2	1	17	11
Murni sari			2		1	1	1		2	1	2	1	2	13	9
Perdana		2		1		1			1	1			2	8	6
Sumber harapan		1			1			1		1	1	2		7	6
Tirta kencana											1	1	2	4	3
Utama jaya		1									1	3	2	7	4

Na : Number of month in activity. To : Total number of trips.

Monthly number of trips per vessel registered in Batang harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
A. Podo Kukun		1		1	1		2		1	1	1	1	2	11	9
Agung makmur		1		1	1	1	1		1		2	1	1	10	9
Andalas		1	1	1	1		1	1	1		1	1	1	10	10
Andromeda			1	1	1	1			2	1	2	1	1	11	9
Anggoro kasih		1		1	1			1	1		1	1	1	9	9
Anta bahagia			1	1	1	1	1		2	1	1	2	1	12	10
Anta wibawa		2	1	1	2	1	1	1	2	1	2	1	2	17	12
Antartika		1		1										2	2
Anugerah jaya		1	1	1						2	1			6	5
Apel indah		1		1	1	1	1	1	1	1		1	1	10	10
Apel putih A.			1	2	1		1	1		1	1	1	1	10	9
Arabika			1	1	1			1	1		2	1		8	7
Armada jaya 2			1	1		1	2	2		1	1	1	1	11	9
Bahtera kasih				1	1					2	2	1	3	10	6
Banyu urip 1			1	1	1	1		1	1	1	1		1	9	9
Banyu urip A		1		1	1	1		1	1	1	1	1	1	10	10
Bara mustika									1		1	1	1	4	4
Berhasil 1			1	1	1			1	1	1		1	1	8	8
Berhasil 2			1	1	1			1		1	1	1	1	8	8
Beringin jaya 1		1	1	1	1	1	1	1	1	1	1	1	1	12	12
Beringin jaya 2		1		1		1		1	1		2	1		8	7
Beringin jaya 3		1	1	1			1	1		1	1	1	1	9	9
Beringin jaya 4			1	1			1		1	1	1	1	1	8	8
Beringin jaya 5			1	1		1		1		1	1	1		7	7
Beringin jaya 6			1		1		1	1		1	2	1	1	9	8
Beringin jaya 7		1			1			1	1	1	1	1	2	8	7
Beringin jaya 8		1		1			1	1	1	1	1	1	1	9	9
Bhineka		1	2	2	2	1	2	2	2	1	1	2	2	20	12
Bima sakti A				1	1			1		1	1	1		6	6
Bima sakti B			1	1	1					2	1			6	5
Bima sakti D			2	1	1		1	1	1	1	1	2		11	9
Bina karya		1	1	1	2	1	1	1		1		1	1	11	10
Bina ria		1		2		2	2	1	1	1	2	2		14	9
Bintang abadi			2	2	1		2	1	1	1	2	2	1	15	10
Bintang bahari			1	1	1		1		1	1	1	1	1	9	9
Bintang flores			1	1			1	1	1	1			1	7	7
Bintang makmur		1	1	1			1		1	1	2		2	10	8
Bintang mas		1	1		1	1	1		1	1	2	1	1	11	10
Bintang murni		1	1											2	2
Bintang mustika				1	1		1	1	1		1	1	2	9	8
Bintang nasional		1		1										2	2
Bintang nelayan			1	1	1	1		1	1	1	1	1	2	11	10
Bintang pasifik			1	1			1	1		1	1	1	1	8	8
Bintang perdana		1		1			1	1	1		2	1	1	9	8
Bintang prima			1	1	1		1	1	1	1	1	2	1	11	10
Bintang remaja		1	1	2	1		1	1	1		2	2	2	14	10
Bintang slamet			2		1	1	1	1	1	1	1	2	1	12	10
Bintang timur		1	2	2	1	1	2	1	1	2	2	1	1	17	12
Bintang united			1	1	1		1	1	1	1	1	1	1	10	10
Bintang wijaya		1	1		1		1	1		1	1	1	1	9	9

Na : Number of month in activity.

To : Total number of trips.

Monthly number of trips per vessel registered in Pekalongan harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Caraka		1		1	1		1	1	1	1	1	1	2	11	10
Charly bumi raya		1		1			1	1		1	1	1	1	8	8
Charly indah		1	1	1	2				1	1	1	2		10	8
Charly mina jaya			1	1			1	1	1		1	2	1	9	8
Charly tirta jaya			1				1		1	1			1	5	5
Charly wijaya 2		1		1	1	1	1	1	1	1	1	1	1	10	10
Citra mustika			1	1	1		1		1		1		2	8	7
Citra samodra		1		1	1		1		1	1		1		7	7
Daya bintang timur		1		1			1	1		1	1	1	1	8	8
Daya samodra		1		1					1					3	3
Delapan karya mina			1	1										2	2
Dwi manunggal jaya			1	1	1	1			1	2	1	1	1	10	9
Gabungan jaya abadi		1		1	1	1		1	2	1	1	1	2	12	10
Gabungan jaya baru		1		1	1			1	1	1	1	1		8	8
Garuda jaya			1		1		1	1		1	1	1	1	8	8
Haitri jaya A		2		2	1		1		1		1	2	1	11	8
Haitri jaya 2					1									2	2
Harapan makmur			1	1			1	1		1	1		1	7	7
Harapan mustika			1	1	1		1		1	1	1	1	1	8	8
Haryanto I		1	1	1	1	1		1	1	1	1	1	1	11	11
Holy jaya			1	1			1	1		1	1	1	1	8	8
Horison									1	1	1	1	2	6	5
Indah harapan		1	1		1		1		1	1		1	2	9	8
Indah wijaya		1	1	1			1	1	1	1	1	1	1	10	10
Inti makmur			1	1	1									3	3
Irwan I			1	1	1	1		1	1		1	2	1	10	9
Jawa indah		1	1	1		1				1	2	1	1	9	8
Jayakarta			1	1	1		1	1	1	1	1	1	1	10	10
Jaya wijaya		1	1	1	2		1		1	1	1	2	1	12	10
Jitu utama			1		1		1		1	1	1		1	7	7
Jitu wahid						1	1	1	1	1	1	2	1	8	7
Kalimas 1		1		1	1		1	1		1	1	2	1	10	9
Kalimas indah A			1	1			1	1	1	1		2	1	8	7
Karya samudra 1			1	1	1					1	1	1	1	7	7
Ketapang jaya 3										1		1		2	2
Laju lancar jaya 2		1	1	1	1									4	4
Laksamana			2	1	2	1		1	1	1	1	2	1	13	10
Laksana berkah B		1	2	1	1	1	3	2	1	4	2	1	1	20	12
Laksana jaya		1	1	2	1	1		1	1	1	2	1	2	14	11
Langgeng jaya							1	1	1	1	1	1	2	8	7
Langsung jaya		1	2	1	1		1		1	1	2	1	1	12	10
Langsung jaya A		1	1		1	1		1	1	1	2	1	1	11	10
Langsung jaya abadi		1			1		1	1	1		2	1	1	9	8
Langsung jaya B			1	1		1		1	1	1	1	1	1	9	9
Naha putra		1		1				1	1		2	1	1	8	7
Nakin subur		1	1	1	1	1		1	1	1	1	1	1	11	11
Nakmur abadi			1	1			1	1		1	2	1	1	9	8
Nargo utama			1	1	1		1		1	1	1	1	1	9	9
Megah abadi			1	1		1		1		2	1	1	1	9	8
Megah harapan		1	1	1		1		1	1		1	2		9	8

Na : Number of month in activity.

To : Total number of trips.

Monthly number of trips per vessel registered in Pekalongan harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Megah indah			1	1			1	1	1		2	1	1	9	8
Megah jaya		1	1	1	1	1		1	1	1	1	1	2	12	11
Megah raya		1	1	1	1	1		1		2	1	1	1	11	10
Mekar gloria makmur		1	1	1	1	1		1	1	1	2	1		11	10
Mekar wijaya		1	1	1	1	1		1	1	1	1	1	1	11	11
Mekar wijaya makmur			1	1		1		1	1	1	1	1	2	10	9
Mina abadi		1		1	1	1	1		1	2	1	1	1	11	10
Mina baruna			1	1	1			1	1	2		2	1	10	8
Mina harapan			1	1	1	1		1	1	2	1	1	1	11	10
Mina indah			1	1	1	1		1	1	1	1	2	1	11	10
Mina jaya 1			1	1	1		1		1	1		1	1	8	8
Mina karya			1	1	1		1	1	1		1	1	1	9	9
Mina makmur			1	1	1		1	1		1	1	1		8	8
Mina mastama			1	1	1		1		1	1		1	1	8	8
Moro mino baru			1	1	1		1		1	1	1			7	7
Muda hasil			1				1	1		1	1		1	6	6
Mustika sejati			1	1			1		1	1	1		1	7	7
Nutiara indah		1		1	1		1	1		1	1	1	1	9	9
Naga mas			1	1			1	1		1	2	1	1	9	9
Neptunus		1		1	1	1		1	1		2	1	1	10	9
Panca mas 1		2												2	1
Pandu 1		1	2	2	1	1	2	1	1	2	2	2	2	19	12
Para putra jaya			2	2	1		3							8	4
Paringi jaya		1	1		1		1	1		1	1			9	8
Pekalongan indah			1	1	1	1		1		1	1	1	2	10	9
Pelangsi kasih		1	1	1	1	1			2	1	1	1	1	11	10
Pelita jaya		1	1	2	1		1	1	1	1	1	1	1	12	11
Pelita makmur										1	1	1		3	3
Pelita sejati		1		1		1	1		1	2	1	1		9	8
Pelopor maju		1		1	1		1	1		1	1	1	2	10	9
Perintis makmur		1	2	2	1	1	3	1	2	1	2	2	2	20	12
Perintis perkasa		1		1	1	1		1	2	1	1	1	1	11	10
Perintis sejahtera				1		1	1	1	1	2	2	2	2	12	9
Pertiwi		2	1	3	1	1	2	2	2	2	2	2	1	20	12
Profit		1	1	1		1		1	1		2	1	1	10	9
Prosper		1	1	1	1	1		1	1	1	1	2		11	10
Pulau seribu		1	1	1	1	1		2	1	1		1	1	11	10
Puncak harapan		1	1		1		1	1		1	1	1	1	9	9
Pustaka abadi		1		1			1	1		1	2		2	9	7
Putra bungsu		1	1	1			1	1	2	1		1	1	10	9
Putra harapan			1	1		1		1	1	1	1	1	1	9	9
Putra karya			1	1	1	1	1		1	1	1	1	1	10	10
Putra manunggal jaya			1	1			1	1	1	1	1	1	1	9	9
Putra manunggal makmur		1		1	1			1	1	1	1	1	1	9	9
Putra pasifik		1	1		1		1	1	1	1	1	1	1	10	10
Putra remaja baru		2	1	1			1		1	1	1	1	1	10	9
Putra samodra			1		1	1	1		1		1	1	1	8	8
Putra setia		1		1										2	2
Putra sulung			1				1		1	2	1	1	2	9	8
Putra wijaya		1		1	1	1		1	1	1	1	2	1	11	10

Na : Number of month in activity.

To : Total number of trips.

Monthly number of trips per vessel registered in Pekalongan harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Ramayana			1		1		1	1	1		2	1	1	9	8
Remaja 1		1	1		1		1	1	1	1	1	1		9	9
Remaja abadi			1		1				1	1	1		2	7	6
Remaja makmur			1	1	2	1		1	1	2	2	1	1	13	10
Rukun utama		2	2	1	2	1		1		1	2	1	1	14	10
Sahabat baru 2			1	1	1									3	3
Samodra adiguna 2			1	1	1		2	1		1	1	1	1	10	9
Samodra hindia		1		1	1		1	1		1	1	1	1	9	9
Samodra luas		1	1	1	1		1	1		1	1	2	1	11	10
Samodra makmur			1	1	1		1		1	1	1			7	7
Samodra pasifik			1	1	1		1		1		2	1	1	9	8
Samodra perdana			1	1	1			1	1		1	1	1	8	8
Sampurna baru			1	1	1		1	1		1	1	1	2	10	9
Sari lancar		1		1	1		1	1		1	1	1	1	9	9
Sari rejeki		1	1	1	1	1		1	2	1	1	1	1	12	11
Sekawan indah		1	1		1		1	1		1	1	1	1	9	9
Senyum bahagia			1											1	1
Senyum harapan			1	1			1		1	1	1	2	1	9	8
Senyum makmur			1		1		1	1	1	1	1	1	2	10	9
Seruni sari				1	1		1		1	1		1		6	6
Setia maju		1		1			1	1		1	1	1	1	8	8
Setia makmur		1		1	1		1	1		1	1	2	1	10	9
Sinar makmur			1	1			1		1	1	1	1	1	8	8
Sinar manunggal abadi			1	1	1	1		1	1	1	1		1	9	9
Sinar perdana		1		1			1	1	1	2	2	1	1	11	8
Sinar samodra 1		1			1		1	1	1		2	1	1	9	8
Sinar slamet		1		1	1	1		1		1				6	6
Slamet agung		1		1	1	1		1	1	1	1	1	1	9	9
Slamet untung		1		1	1		1		1		1	1	1	8	8
Soyo abadi		1		1	1		1		1	1	1	2	1	9	8
Soyo agung			1	1	1	1		1	1	2	2	1	1	12	10
Soyo agung 2		1			1	1	1		1	2	2	1	1	11	9
Soyo agung 3		1		1	1	1		1	1	1	1	1	1	10	10
Sri kandi		1	1		1	1		1	1	1	1	1	1	10	10
Sri surya		1	1	1	1	1	1	1	1	2	1	2	1	14	12
Sukses								1		1		1	1	4	4
Sukses bahagia		1		1	1		1	1		2	1	1	1	10	9
Sumber daya makmur		1			1		1	1	1		1	1	1	8	8
Sumber harapan		1	2	1	2		2	1	1	1	1	2	1	15	11
Sumber harjo			1	2	1						2	2	2	10	6
Sumber harjo A		1	1	1	1	1	1				1	1	1	9	9
Sumber harjo B											1	1		2	2
Sumber indah		1		1						1				3	3
Sumber manggis 1			1	1	1		1	1		1	2	1	1	10	9
Sumber terang				1	1		1		1	2	1	1	1	9	8
Surya indah			1	2	1	1	1	2		1	2	1		12	9
Surya makmur		1		1	1		1	1	1		1	1	2	10	9
Surya wijaya			1	1			1	1	1	1	1	1	1	9	9
Susanto I		1	1	1	1	1	1	1		2	1		2	12	10
Syailendra		1	1	2	1	1	2	2	2	2	2	2		18	11

Na : Number of month in activity.

To : Total number of trips.

Monthly number of trips per vessel registered in Pekalongan harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Teguh harapan		1		1	1	1		1	1	1	1	1	1	10	10
Teguh harapan jaya		1		1	1	1		1		1	2	1	2	11	9
Teguh jaya			1	1	1	1	1			1	1	1	1	10	10
Teguh makmur							1	1		1	1	1	2	7	6
Teguh sejati		1		1	1	1	1		2	1	1	1	2	12	10
Tirta abadi		1		2		1	1	1		1	2	1	1	11	9
Tirta katulistiwa farming		1	1	1		1		1	1	1	1		1	9	9
Tirta makmur					1									1	1
Tri mina jaya			1		1		1			1	1	1		6	6
Trimurti		1		1	1		1	1	1	1	1	1	1	10	10
Tri sejati			1	1			1		1	1	1			7	7
Tujuh-tujuh		2	1	1	2	1				1	1	1		10	8
Tunas karya			1	1	1	1	1		1		1	1	1	9	9
Tunas harapan			1	1		1		1	1		1	2	1	9	8
Udayana		1		1		1		1		1	2	1	1	9	8
Union abadi			1	1		1		2	1	1	1	1		9	8
Union harapan			2	1			1	1	1	1	1	1	1	10	9
Union jaya		1		1			1	1	1		1	1	2	9	8
Union jaya abadi		1		1		1			1		2	1	2	9	7
Union makmur		1		1			1	1	1	1	1	1	1	9	9
United jaya		1		1		1		1	1	1	1	1	1	9	9
Venus			1	1	1		1	1	1		2	1		9	8
Wira buana			1	1	1	1		1		2	1	1	2	11	9
Yupiter		1		1	1		1	1	1	1		1	1	9	9
Yustitia		1		2	1		1	1			1	1	1	9	9

Na : Number of month in activity. To : Total number of trips.

Monthly number of trips per vessel registered in Pekalongan harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Indah jaya makmur				1						1	2		1	5	4
Mina graha		1			1				1	1				4	4
Mustika jaya		1		1					1	1		1	1	6	6
Nusa indah		1												1	1
Santa lucia		1							1		1			3	3
Satria baru		1		1					1		1			4	4
Satria muda		1	1											2	2
Satria perkasa									1	1	1	1		4	4
Satria sakti		1	1	1					1		1			5	5
Sinar mutiara		1	1	1					1	1	1			6	6

Na : Number of month in activity. To : Total.

Monthly number of trips per vessel registered in Rembang harbour.

Vessel name	Month	01	02	03	04	05	06	07	08	09	10	11	12	To	Na
Along jaya						1		1	1	1	1	1	1	7	7
Banyu urip 2		1		1			1		1	2	2			8	6
Banyu urip B		1			1			1		1	2			7	6
Berkah jaya 2										2		2		5	3
Bima samodra			1	1			1		2	1	2	1		10	8
Gondo mino			1		1			1	1	1	1	1		8	8
Jaya agung		1						1	1	1	1	1		7	7
Jaya sentosa		1			1		1		1	2	2	1		10	8
Kartika sakti		1		1	1		1	1	1	1	1	1		10	10
Kintamani		1		1		1		1	1	1	1	1		8	8
Makin maju		1				1	1		2	1	1	1		9	8
Margo jaya			1	1					1	1				4	4
Margo lestari			1	1			1	1	2	1		2		10	8
Margo makmur		1			1			1	1	2		1		8	7
Margo mukti		1		1	1		1	1	2	1		1		10	9
Margo mulyo		1		1	1		1	1		1	2	1		10	9
Margo rahayu			1	1			1		2	1	1	2		10	8
Margo sejati		1		1	1	1		1	1	2		1		11	9
Margo sentosa			1	1			1	1	1	1		1		8	8
Margo waluyo												1		2	2
Nina raya		1	1		1	1	1	1	1	1	2	1		11	10
Mustika indah		1										1		2	2
Mustika sakti		1		1			1	1		1	2	1		9	8
Panca harapan										1	1	2		5	4
Perwira sakti			1	1	1		2	1	1	2	1	1		12	10
Putra remaja			1							1	2			4	3
Sarono mino 1		1	1					1	1	1	2	1		9	8
Satria			1						2	2	1	2		9	6
Theresia		1	1		1		1		2	1	1	2		10	8
Tunas wibawa			1		1		1	1	1	1	2	2		11	9
Wijaya sakti		1		1			1	1	1		1	1		8	8
Yallasena												2		3	2

Na : Number of month in activity.

To : Total.

Monthly number of trips per vessel registered in Juwana harbour.

	Tegal	Pekalongan	Batang	Juwana	Rembang	Total
1990	57	224	15	32	10	338

Number of purse seiners registered in these harbours and which achieved at least one trip during the year.

	January	February	March	April	May	June	July	August	September	October	November	December	Mean
Tegal	38	30	40	42	15	35	30	32	43	40	32	40	35
Pekalongan	118	144	184	151	85	135	149	148	175	192	190	176	154
Batang	10	9	8	11	9	7	3	9	10	12	11	12	9
Juwana	18	13	14	12	5	16	18	23	27	23	29	26	19
Rembang	8	3	5	1				7	5	6	2	2	3
Total	192	199	251	217	114	193	200	219	260	273	264	256	220

Monthly number of purse seiners which are active in each harbour.

	January	February	March	April	May	June	July	August	September	October	November	December	Mean
Tegal	32	29	41	45	15	35	29	39	38	45	37	39	35
Pekalongan	88	129	171	138	81	113	123	119	146	136	133	132	126
Batang	6		1	4	3	4	2	3	3	23	15	12	6
Juwana	70	44	40	32	14	45	47	71	80	87	91	91	59

Monthly number of purse seiners landing in each harbour.

	January	February	March	April	May	June	July	August	September	October	November	December	Mean
Tegal	31	28	40	41	15	34	28	27	37	37	32	34	32
Pekalongan	85	120	165	132	75	109	122	114	139	134	130	128	121
Batang	6		1	4	3	4	2	3	3	11	7	9	4
Juwana	18	13	14	12	3	16	17	22	26	23	29	26	18

Monthly number of purse seiners landing in the harbour of its registration.

	January	February	March	April	May	June	July	August	September	October	November	December	Mean
Tegal	1	1	1	4	1	1	1	2	1	8	5	5	3
Pekalongan	3	9	6	6	6	4	1	5	7	2	3	4	5
Batang				1	1	1	1	1	1	12	8	3	2
Juwana	52	31	26	20	11	29	30	49	54	64	62	65	41

Monthly number of purse seiners which land in an harbour where it is not registered.

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