



ORIGINAL ARTICLE



ok'ke ftYg;krhy eRL;0;olk;

vfuy dękj jkBkM

Lkg; lřch i k/; ki d, Jherh. y{ehckbz jk/kkfd"ku rks.khoky dkwyst vktD dkkE l z

vdksyk, egkj'Vz

Lkjlek %

txHkjr Aquarium ½typj½ o I tkovhl kBh ekl k ; lřk cktkj egRo iwz gřsk o I krR; kus ok-r vlgř- ; k cktkjkr ; s kjs ekl s nkřh izdkjkr Wild and captive stocks. vud Lvd Ze/; s ikGho thohr ek'W; k foHkx gk fo' kř egRo iwz o Qk; nř kj foHkx vlgř Coupled within the sale of live fish, there is a markt for aquaria, aquarium supplies and of course, fish food amd mediine. toGikl 10 feyh; u I tkovhl kBh [kD; kik.; krhy ekl s l Ā iwz txHkjr o"Vkj egRokps Bjrkr- txHkjr xkM; k ik.; krhy ½Qk okWj½ ek' kps iek.k tklr vlgř o ; k izdkjkr 5000 gu vř/kd iztkrh vk<Grkr- I tkovhl kBh ylx.kD; k ek' křk cktkj o ½tfor typj] I tkovhps ryko½ eV; toGikl US\$3 billion vlgř

Hkjrkrhy ekl ekjh [ni ekxs v l r k u k l d k nř W; k ok'kd mRi knukl toGikl 10 djkm #i; kps ; křnku nrs iffkuř thoul Ros o {kj] [křt nD; ; kps ek' kře/; s vř/kd v l Y; kus gs egRo iwz vé Bjr- Hkjrkr vř/kd k Hkxkr ekl k gk vlgkjkrhy egRo iwz ?Vd vlgř Eg. k eRL; mRi knu ok<fo. l s gk ykclřk vlgkjkr I dkj.k i křVhđr vk.k.; kř; k -f"Vus Qkj egRokps vlgř

iLrlok

Lokra; iLrhikl wř fo' křk% egkj'Vkr jkř; fufeřhurj vud iVcđkjs ryko cđkys tkĀ ylxys l/; k egkj'Vkr iVcđkjs foHkxkps l ękjs 1]800 tyk'k; v l w R; kps l jkl jh ty{ř toG&toG vMřp y{k gđVj vlgř ; ki řh cjp tyk'k; MłkjG Hkxkr v l Y; kęřs 'krřp; k Qkj l s dkeh vlys ulghr- ek= eRL; 'krhyk Qkj ekřs {ř fueřk >kys ; k f'kok; vud tyk'k; kps cđkđke plyv l w eRL; 'krđfjrk {ř fořy iek.kr ok<ys vlgř o ok-r vlgř

; k cnyyř; k ifjflkrheřs ; k 0; olk; kps gřkeh Lo#i cnyys ekl ekjkauk o"krhy cęřđ dĠ ekl ekjh dj.k s 'kD; >kys vlgř gs {ř , o<; k ekř; k iek.kr ok<ys vlgř dh ekl ekjř; frfjDr brj ykclřk gk uohu 0; olk; mi yč/k >kyk vlgř MłkjG Hkxkrhy tyk'k; křk dĠ ekl ekj cLrh ulghr f'kok; unđkřp; k ekl ekjkauk xkorGij Nkřs iVcđkjs ryko ekl ekjh kBh feGr v l Y; kęřs rs nřojp; k ekř; k tyk'k; kđMs fo' křk y{k nĀ 'kđr ulghr- ifj.kēh brj 0; olk; krhy ykcl] Hłēghu 'krđjh] 'krētij] cđkj xteh.k r#.k ; k l olk tyk'k; krhy ekl ekjh gk uohu 0; olk; feGkyk- dks uk f'kol lřj tyk'k; kr l ękjs 200 t.k ekl ekjh đjkr- R; ki řh l ękjs 150 'krētij vlgř- ; synjh tyk'k; kr l ękjs 400 t.k ekl ekjh đjkr- Kkusoj l lřj ½eGkř nkipljh ½k.kř; řhy tyk'k; kr

ekl ekjh dj. kjs l ozt. k vknokl h vkg- ukfkl kxj tyk'k; kr ekl ekjh dj. WU; ki dth 60 ifr'kr ykd vknokl h fdok 'kretj vkg- FKMD; kr uohu fuelz k >kyY; k tyk'k; keGs xteh. k Hkxkrhy ekl ekjka vkr. k brjkaugh 0; ol k; kps l k/ku feGkys vkg

MkxjG Hkxkrhy tyk'k; k; k fdulj; ko#u ek'kph l Mds; z okgnol dj. lq okgnohl kBh ylx. WU; k VsiY; k cufo. lq tkGh fo. k. lq ekl Ghph fo0h ; k vuqMxod 0; ol k; kr gh vfkcdk/kd ykdruk jstxkj feGr vkg

ok'le ftYg; krhy eRL; 0; ol k;

ok'le ftYg; ke/; s ok'le] ekysko] fj l M] dkjatk] ex: Gihj o ekulsk ; k rkyD; kpk l ekosk vkg prfl zk mlykysk vdkyk ftYgk o inyk vejkorh ftYgk o ; orekG ftYgk vl u nf{k. k i jHk. kh ftYgk vkg rj if'ped cy<k. k ftYgk vkg ftYg; kps , duk {s-QG 5-156 pgl fdykehVj vl u ftYg; kr izkl dh; eRL; 0; ol k; kl kBh l gk rkyD; kpk l ekosk vkg ftYg; krhy i kol kph l jkl jh 750 rs 1000 fe- vkg ftYg; kr u okg. WU; k iefk un; k vMk. k i duxak BR; kh vl u R; kph ftYg; krhy , duk ykch 315 fd- feVj , o-h vkg ftYg; krhy 76 eFPNekj l kfkps 3037 l Hkl n vkg- ftYg; kr 1 eRL; 0; ol k; l gclkh l kfkpk l ak dk; Jr vkg ftYg; krhy miyG/k ty{skpk ri'khy [kyhyiek. k vkg

rkydk 0- 1-1 %ok'le ftYg; krhy tylank

v-0-	Ryko	Lk; k	Tky{ls- gDVj
1-	gakch ryko	199	1047 gDVj
2-	Okjekgh ryko	107	4174 gDVj
	, duk	306	5221 gDVj

rkydk 0- 1-2 %ok'le ftYg; krhy rykokp rif'ky 1/2 y{ls-kuq lj 1/2

v-0-	Ryko	Lk; k	Tky{ls- gDVj
1-	0&20 gDVj	240	1285 gDVj
2-	21&60 gDVj	56	1967 gDVj
3-	61&200 gDVj	08	967 gDVj
4-	201&1300 gDVj	02	1002 gDVj
	, duk	306	5221 gDVj

ojhy rkydk 0- 1-2 e/; s ok'le ftYg; krhy rykokp R; k; k {s-QGkuq kj dyy; k oxhdj. kpk vk-kok iLr dyyk vkg , dajhr 20 gDVjgm deh {s-QG vl yy; k rykokp l; k eB; k rykoki{kk egroi uKJR; k vfkcd vly; kps vk-Grs

rkfydk Ø- 1-3 %ok'ke ftYg;krhy Ekkydlfugk; rykolokp ri 'lhy

v-Ø-	Rkyko	Lk; k	Tky(ks gDVj
1-	iKvcalkjsryko	78	4095 gDVj
2-	ftYgk ifj" kn	170	972 gDVj
3-	Xke ipk; r	24	63 gDVj
4-	lkxj ifj"kn	03	03 gDVj
5-	Lfkukhd Lrj o brj	30	88 gDVj
	,dwk	306	5221 gDVj

Okjy Rkfydk Ø- 1-3 e/;s ok'ke ftYg;krhy rykolokp ekkydlfugk; ri 'lhy iLr r dyyk vkg ok'ke ftYgk ifj"kn; k ekkydlf; k rykolokp l; k brj l k/vuk; k y(k.kh; fjr; k vf/kd vLY; kps vk<Grs

rkfydk Ø- 1-4 %ok'ke ftYg;krhy tyfoglj

1997&98 rs 2008&09

o"i	,dwk tyfoglj ½gDVj½	rykolokp l; k					
		gakeh ryko		ckjelgh ryko		,dwk	
		l; k	ty(ks ½gDVj½	l; k	ty(ks ½gDVj½	l; k	ty(ks ½gDVj½
1997&1998	4942	103	1585	94	3357	179	4942
1998&1999	4942	103	1585	94	3357	179	4942
1999&2000	4942	103	1585	94	3357	179	4942
2000&2001	5074	103	1585	97	3489	200	5074
2001&2002	5395	103	1585	106	3810	209	5395
2002&2003	5395	103	1585	106	3810	209	5395
2003&2004	5000	103	1585	106	3810	209	5395

2004&2005	4843	199	1047	101	3806	300	4853
2005&2006	5221	199	1047	107	4174	306	5221
2006&2007	5221	199	1047	107	4174	306	5221
2007&2008	4075	199	1047	107	4174	306	5221
2008&2009	5512	199	1047	107	4174	306	5221

L=kr %ftYgk eRL; fodkl vf/kdkjh] olf'ke

olf'ke ftYg;krhy ,dwb tyfogyj {s= 1997&98 rs1998&99 e/s4942 gDvj tyfogyj {s= vIY; kps y{kr ;rs lu 2000&01 rs2003&04 i; ĩrps tyfogyj {s= 5074 rs5000 gDvj vlsfnl m ;rs 2004&05 rs2008&09 i; ĩrps4843 gs & rs5512 gs tyfogyj {s= vIY; kpsLi"V ghrs ,dwb v/; ;u dkGkr 1998&2009 i; ĩr ,dwb tyfogyj {s= ;krhy Qjd y{k.kh; ul Y; kpsfun'kzkl ;rs

ftYg;krhy gakeh rykolph I ĩ; k 1997&98 o 2003&04 i; ĩr 103 vI m R; kps ty{s= 1585 gs vIY; kps v/; ; ukr vk<Gm ;rs 1997&98 rs2003&04 i; ĩr ftYg;krhy gakeh rykolph I ĩ; k o ty{s=kr Qjd vk<Gm ;s ukgh- lu 2004&05 rs 2008&09 i; ĩr gakeh rykolph I ĩ; k 199 vI m R; kps ,dwb {s= 1047 gs vlsfnl m ;rs 2004&05 rs2008&09 i; ĩr gakeh rykolph I ĩ; k ok= ty{s= deh >ky; kpsfnl m ;rs

R; kpiek.kk cjekgh ryko g; kph I ĩ; k 1997&98 rs1999&2000 i; ĩr 94 vI m R; kps {s= 3357 gs vIY; kps vk<Gm ;rs lu 2001&02 rs2003&04 i; ĩr rykolph I ĩ; k 106 vI m R; kps {s= 3810 gs vIY; kps vk<Gm ;rs 2004&05 e/s rykolph I ĩ; k 106 vI m ty{s= 3806 vkgs 2005&06 rs2008&09 i; ĩr rykolph I ĩ; k ok= 107 >ky; kph fnl m ;rs rj R; kps {s=QG 4174 gs vI s v/; ; ukl ;rs

ftYg;krhy gakeh o cjekgh rykolph ,dwb I ĩ; k 1997&98 o 1999&2000 e/s179 vI m R; kps ,dqk ty{s= 4942 gs vIY; kps fnl rs 2000&01 e/s rykolph I ĩ; k ok= 200 >kyh o R; kps ty{s= 5074 vIY; kps vk<Gm vkys rs 2001&02 rs2003&04 i; ĩr g; k rykolph I ĩ; k 209 o R; kps {s=QG 5395 gs >ky; kps vk<Gm ;rs 2004&05 rs2008&09 e/s;rykolph I ĩ; k 306 vI m R; kps {s=QG 5221 gs vI sfun'kzkl ;rs

; k gakeh o cjekgh ryko g; kR; k ,dwb rykolR; k I ĩ; s o {s=QGkr fhkkrk vI m R; kR; krhy Qjd egRo iwz ul Y; kps fun'kzkl ;rs

rfydk Ø- 1-5 %ok'le ftYg;krhy eRL; Igdjkh I hFK

1997&98 rs2008&09

o'k	eRL; Igdjkh I hFK I d; k	eRL; 0; kol kf; dkph ykd I d; k	ftYgk eRL; Igdjkh I hFK I Hkl n I d; k
1997&1998	49	14366	1837
1998&1999	49	14366	1837
1999&2000	49	21549	1837
2000&2001	50	23489	2000
2001&2002	52	25406	2250
2002&2003	52	25406	2127
2003&2004	62	25406	3081
2004&2005	67	25406	2697
2005&2006	67	25406	3012
2006&2007	66	25406	3037
2007&2008	76	25406	3125
2008&2009	76	25406	3037

L=kr %ftYgk eRL; fodkl vf/kdkjkh ok'le

ok'le ftYg;krhy eRL; Igdjkh I hFK I d; k 1997&98 rs1999 &2000 i; r eRL; Igdjkh I hFK I d; k 49 vk<Gu ;rs lu 2000&01 e/s R;kr ,dk I hFK ok< glu Igdjkh I hFK I d; k 50 >KY; kps vk<Gu ;rs2001&02 rs2002&03 i; r Igdjkh I hFK I d; k 52 fnl u ;rs lu 2003&04 rs2008&09 i; r eRL; Igdjkh I hFK I d; k 52 rs76 >KY; kps vk<Gu ;rs ftYg;krhy I hFK I d; k ; u dkGkrhy eRL; Igdjkh I hFK I d; k ;krhy Qjd egRo i wZ v I Y; kps fun'kkl ;rs

ok'le ftYg;krhy eRL; 0; kol kf; dkph ykd I d; k 1997&98 rs 1998&99 e/s 14366 v I Y; kps fnl u ;rs 1999&2000 rs 2001&02 e/hy ykd I d; k 21549 rs 23489 v' h vk<Gu ;rs r l p 2002&03 rs 2008&09 i; r eRL; 0; kol kf; dkph I d; k 25409 brdh v l u ; k I d; s dkghh Qjd >kyk ul u , duk v/ ; ; u dkGkr eRL; 0; kol kf; dkph ykd I d; s y{k.kh; Qjd ulgh v l s fun'kkl ;rs

ok'le ftYg;krhy ftYgk eRL; Igdjkh I hFK I Hkl n I d; k 1997&98 rs 1999&2000 i; r I Hkl n I d; k 1837 brdh v/ ; ; ukl ;rs lu 2002&03 rs 2008&09 i; r eRL; Igdjkh I hFK I Hkl n I d; k 2127 rs 3037 i; r ok< >KY; kph fun'kkl ;rs ; k I hFK I d; k ; u dkGkrhy I Hkl n I d; k I d; s Qj r Okor ul u ; ; krhy Qjd y{k.kh; ulgh v l s fun'kkl ;rs

rkydk Ø- 1-6 %ok'ke ftYg;krhy eRL;ftjSmRiknu] eRL;cht

l p; u] eRL;Riknu 1997&98 rs2008&09

o'k	eL;ftjSmRiknu %yk[kr']	eRL;cht l p; u %yk[kr']	eRL;Riknu %e- Vu½
1997&1998	292	76-50	3190
1998&1999	298	76-51	3196
1999&2000	421	107	3343
2000&2001	372	82	1110
2001&2002	301	103	1690
2002&2003	521	101	2000
2003&2004	488	146-8	1955
2004&2005	399	162-17	2698
2005&2006	511	184-6	3026
2006&2007	337	181	2981
2007&2008	181	181	2700
2008&2009	349	170	2700

L=kr %ftYgk eRL; fodkl vf/kdjh] ok'ke

ok'ke ftYg;krhy eRL;ftjSmRiknu 1997&98 rs1998&99 i; 292 o 298 yk[k vk<Gu vkys 1999&2000 e/s eRL;ftjSmRiknu 421 yk[k brds>kys 2001&02 rs2008&03 e/s eRL;ftjSmRiknu 301 rs349 yk[k >KY; kpsfun'kzkl ;rs 2002&03 e/s eRL;ftjSmRiknu l okl/kd vl 521 yk[k brds mRiknu >KY; kps vk<Gu ;rs R; kpiak.l okl' deh eRL; mRiknu l u 2007&08 e/hy vl rs 181 yk[k vlY; kps v/; ; ukl ;rs ; k v/; ; u dkGkr eRL;ftjSmRiknukr vfr'k; rQkor vl ;R; krhy Qjd y(k.kh; vlY; kpsfun'kzkl ;rs

ok'ke ftYg;krhy eRL;l hfkps eRL;cht l p; u 1997&98 o 1998&99 e/s 76-60 o 76-51 yk[k vl 1999&2000 e/s 107 yk[k vk<Gu vkys 2000&01 rs2001&02 i; 82 rs 103 yk[k eRL;cht l p; u >kys vlY; kps vk<Gu ;rs 2002&03 rs2008&09 e/hy eRL;cht l p; u 101 rs170 yk[k ;R; k nje; ku vk<Gu ;rs ; k ekgrhu vl s y{kkr ;rs dh] l okl/kd eRL;cht l p; u 2006&07 o 2007&08 e/hy vl rs 181 yk[k vlY; kps v/; ; ukl ;rs ; k v/; ; u dkGkrhy eRL;cht l p; ukr njo"hz ok >kysy vl R;R; krhy Qjd y(k.kh; vkgs vl sfun'kzkl ;rs

ok'ke ftYg;krhy eRL;Riknu 1997&98 o 1999&2000 e/s 3196 rs 3343 esVu- eRL;Riknu >KY; kps fnl ;rs 2000&01 rs2008&09 i; eRL;Riknu 1110 esVu- rs2700 esVu- vk<Gu ;rs eRL;lgdkjh l hfkpk l u 1999&2000 e/s

vf/kd eRL; Riknu >kys vI u rs 3343 esVu brdsfni u ;rs olf'ke ftYg;krhy eRL; Riknu ;R; k I q; rhy Qjd y{k.kh; vIY; kps v/; ; ukl ;rs

rfydk Ø- 1-7 %OLF'ke ftYg;krhy eRL I d/kd fodkl ; a.k rDrk

1997&98 rs 2008&09

o'k	fodfl r ty{ks ½DVj½	rGh chlklde ½DVj½	if'k{k.k.kkMZ I [;k	eRL; Riknu Vu½	, dwk ;kstuk rjrm ½yk[kr½
1997&1998	47-5	5-5	21	83-02	10-40
1998&1999	47-5	5-5	28	83-07	10-70
1999&2000	68	11	30	45	3-52
2000&2001	60	6-8	9	72-4	3-52
2001&2002	60	3-2	2	39-5	2-82
2002&2003	63-24	20	15	42-5	3-71
2003&2004	58-12	20	25	52-75	4-802
2004&2005	52-7	7-11	21	50-81	2-015
2005&2006	56	19	9	89-8	7-18
2006&2007	87-25	5-7	90	50	4
2007&2008	80	3	20	45	3-94
2008&2009	72	0-8	50	42-1	5-33

L=rs %ftYgk eRL; fodkl vf/kd[kjh] olf'ke

olf'ke ftYg;krhy eRL; I d/kd fodkl ; a.k 1997&98 e/s 47-5 gs fodfl r ty{ks vIY; kps vk<Gu ;rs 1999&2000 rs 2001&02 e/mhy fodfl r ty{ks 68 gs rs 60 gs brds v/; ; ukl ;rs 2002&03 e/s 63-24 gs {ks fodfl r >KY; kps y{k.kh; ;rs R; kpi ek.k 2008&09 i; r 72 gs ty{ks fodfl r >KY; kps vk<Gys vI u 2006&07 e/mhy vf/kd ty{ks fodfl r >KY; kps v/; ; ukl ;rs gs fodfl r ty{ks 87-25 yk[k vIY; kps fni u ;rs ; k loZ fodfl r ty{kskrhy Qjd egroiuk vIY; kps fun'kkl ;rs

eRL; I d/kd fodkl ; a.k 2002&03 o 2003&04 e/s loZ/kd rGh chlklde vI u rs 20 gs brds vk<Gu ;rs rI p loZr deh rGh chlklde 2008&09 e/s vI u rs 0-8 gs brds vk<Gu ;rs ; k v/; ; u dIkGr , dwk rGh chlklde ;krhy Qjd y{k.kh; vIY; kps y{k.kh; ;rs

lu 2001&02 e/s eRL; l m/kl fodkl ; a. kr if'k{k. WFKph l q; k lok' deh vl m QDr 2 brdh fnl m ; s rj 2006&07 i; r ; k l q; s y{k.kh; ok >kysh vl m rh 90 brdh vl ; ; ukl ; s l jokrhyk 1998&99 e/s 28 if'k{k. WFK vl Y; kps rj lu 2009 e/s 50 if'k{k. WFK vl Y; kps vk-Gm ; s ol'ke ftYg; krhy ; k if'k{k. WFK; k l q; shy Qjd egRoivl vl Y; kps fun'kl ; s

eRL; l m/kl fodkl ; a. krhy eRL; l i knu 1997&98 e/s 83-02 esVu- o 1998&99 e/s 83-07 esVu vf/kl vl Y; kps y{kkr ; s lu 1999&2000 rs 2008&09 i; r 45 esVu- rs 42-1 es Vu brds eRL; l i knu vl Y; kps fnl m ; s njE; ku lu 2003&04 rs 2004&05 e/s 52-75 esVu eRL; l i knu vl Y; kps fun'kl ; s

; k vl ; ; ukru vl s y{kkr ; s dhj ol'ke ftYg; kr eRL; l m/kl fodkl ; a. k jkfo. ; kr ; s vl m R; l ; krhy Qjd Qj egRoivl vks vl sn'Vhl ; s

ol'ke ftYg; krhy eRL; l gdljh l hFKph , dwk ; stuk rjrm 1997&98 e/s 10-40 yk[k vkgs rlp 1999&2000 rs 2008&09 i; r gh rjrm 3-52 yk[k rs 5-33 yk[k v'lh vk-Gm vlyh ; k l i vl o'Wzhy rjrmhr lu 1998&99 e/s vf/kl ; stuk rjrm vl Y; kps vl ; ; ukl ; s R; kpi ek. ks ; k i R; d o'Wzhy ; stuk; k rjrmhr Qj rQkor vl m R; l ; k l q; shy Qjd y{k.kh; vl Y; kps fun'kl ; s

fu"d'z

ol'ke ftYg; krhy , dajhr 47-2 qfr'kr eRL; 0; ol kf; d i ek. ks ' kl ukdMm eRL; 0; ol k; kdfjrk ; stuk jkfoY; k tkrkr ; kph ekgrh ukgh- ol'ke ftYg; krhy eRL; 0; ol kf; d eRL; foOh djrkak ; s W; k l eL; kps foj. krm vl s vk-Gm ; s eRL; 0; ol k; krhy ; s W; k vusl vMp. khish vf/kl xkor eRL; l i kVuk ul Y; kph egRoivl vMp. k vl Y; kps y{kkr ; s rlp eRL; ikyu dj. W; k cgrak (77.1%) 0; ol kf; d i ek foek ul Y; kps vk-Grs ol'ke ftYg; krhy eRL; 0; ol kf; d i ek ; k jk; k jpus ek/kr o. l i krm cgrak (76 qfr'kr) eRL; 0; ol kf; d i kps ?kj dPps vl Y; kps vk-Gm ; s

ol'ke ftYg; krhy eRL; 0; ol kf; d i ek eRL; 0; ol k; kdfjrk d i ek krhy l nL; kph enr o R; ki kl m gskjh vkfkl enr ; l ; krhy l i k; dh; fo'y's k. krhy Qjd egRoivl (P<0.05) vl Y; kps fnl m ; s vf/kl k (68.8 qfr'kr) 0; ol kf; d i ek eRL; 0; ol k; kdfjrk d i ek; kdMm i R; k jk; k enr gls vl Y; kps vk-Grs

l m h z x h k l p h

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4. d i JSB , l- M h eRL; , o eRL d h h k h k h 81-85-771-99-5 , chl h i Cyhdskuj uVjkt uxj] beyh QKvd] t; i j jkt LFku-
5. v d i k ftYg; krhy eRL; 0; ol k; , vfuy d i k j j k B M (Indian Streams Research Journal)