

The Overview Of Indonesia Aquaculture Issues

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Strengths Of Indonesia Aquaculture

→ HIGH BIODIVERSITY



Wide Commodity diversity

→ EXTENSIVE AREA



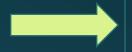
Low Land Cost

GEOGRAPHY AND CLIMATE



Good habitat for many high value fish commodity

HUMAN RESOURCES

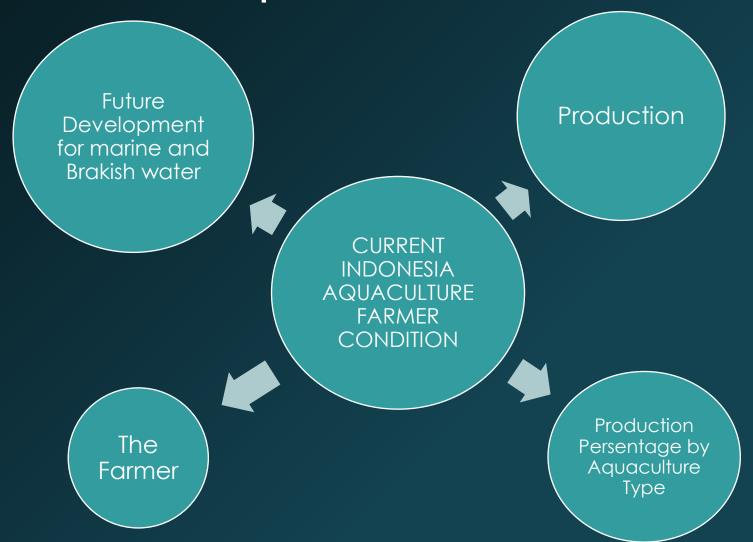


High quantities of job seekers and people staying in coastal area but relatively unskill





Current Condition Of Indonesia Aquaculture



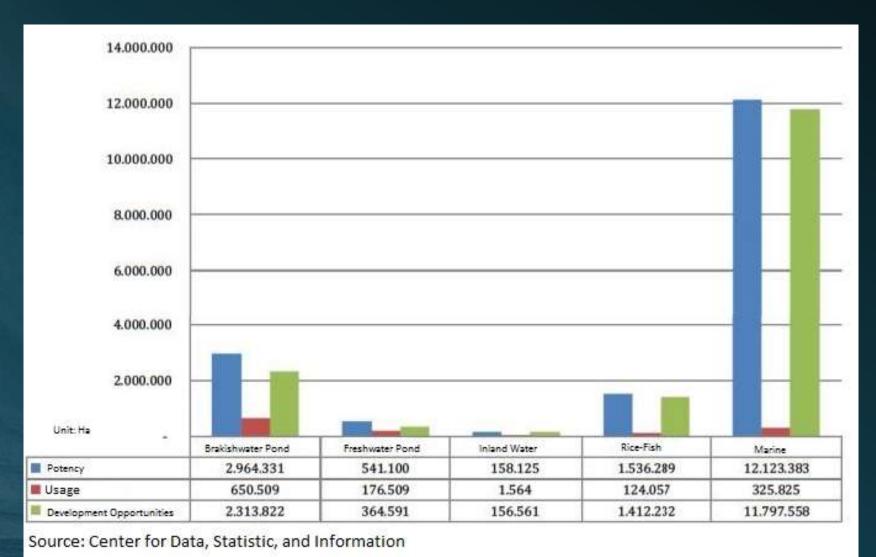
Area Coverage For Aquaculture

Unit: Ha

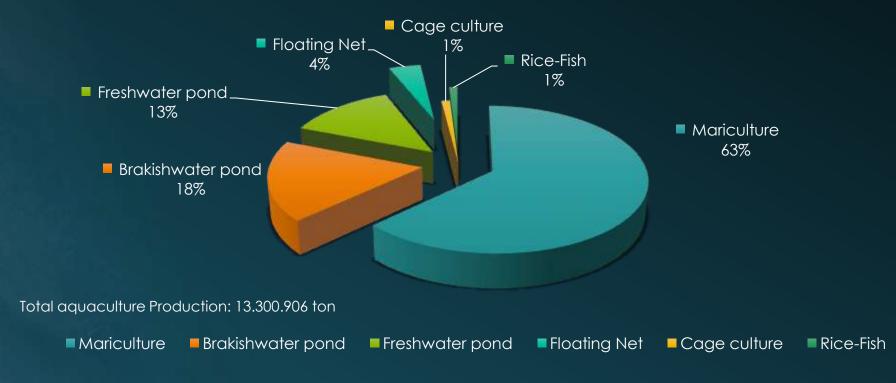
Type Of Aquaculture		Year				Increasing Average (%)		
	2009	2010	2011	2012	2013	2009-2013	2012-2013	
Total area	996.223	1.080.966	1.101.634	1.125.597	1.278.464	6,45	13,58	
Mariculture	43.840	117.650	169.292	178.435	325.825	75,12	82,6	
Brakishwater pond	669.738	674.942	652.475	657.346	650.509	-0,71	-1,04	
Freshwater Pond	153.326	148.278	126.382	131.776	176.509	5,04	33,95	
Cage	300	637	561	476	218	7,78	-54,07	
Floting Net	1.386	744	1.294	1.371	1.345	7,89	-1,89	
Rice-Fish	127.679	138.715	151.630	156.193	124.057	0,1	-20,57	

Source: DJPB

Potency Of Aquaculture Area and Usage Level In Indonesia, 2013



Production Percentage by Aquaculture Type



Source: Kelautan dan perikanan dalam angka 2014.

Aquaculture Commodity by Production

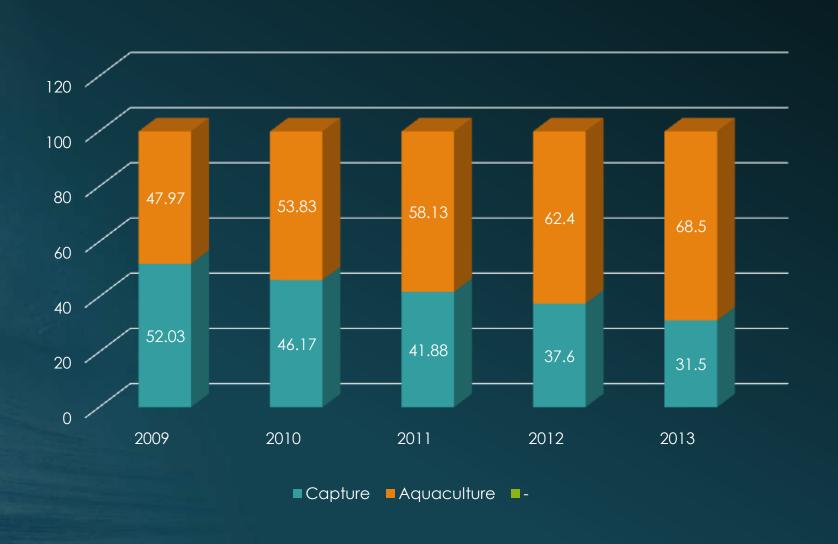
	Species		Y	Increasing Average (%)		
à		2011	2012	2013	2014*	2012-2013
P	Total	7.928.962	9.675.553	13.300.906	14.521.349	
¥	Production rank (2013)					
ŽĮ.	1. Seaweed	5.170.201	6.154.854	9.298.474	10.234.357	42,73
Š	2. Tilapia	567.098	695.063	914.778	912.613	31,61
	3. Milk fish	467.449	518.939	627.333	621.393	20,89
	4. Shrimp	400.385	415.703	645.955	592.219	55,39
	5. Catfish	337.577	441.217	543.774	613.120	23,24
	6. Carp	332.206	374.366	412.703	484.110	10,24
S	7. Vietnamese catfish	229.267	347.000	410.883	403.133	18,43
	8. Gouramy	64.252	84.681	94.605	108.180	11,72
	9. Grouper	10.580	11.950	18.864	12.430	57,85
	10. Red Snapper	5.236	6.198	6.735	4.439	8,66
	11. Other	344.731	265.580	326.801	535.355	23,05

Local Fish Consumption Rank

Preference Rank*	Species
1	Ikan kembung - Chub Mackerel (Rastrelliger kanagurta)
2	Tongkol - Mackerel Tuna (Euthynnus affinis)
3	Lele – Catfish (Clarias Sp.)
4	Ikan Mas – Common Carp (Cyprinus carpio)
5	Ikan Selar – Yellowstripe Scad (Selaroides leptolepis)
6	Bandeng – Milkfish (Chanos chanos)
7	Mujair – Mozambique Tilapia (Oreochromis mossambicus)
8	Gabus – Snakehead (Channa striata)
9	Kakap – Red Snapper (Lutjanus campechanus)
10	Baronang – Rabitfish (Siganus Sp.)

Source: processed data, base on Ditjen P2HP

Aquaculture Contribution Toward National Fisheries Production 2009-2013



Farmer Majority

	< 0,1Ha	0,1 - 0,3Ha	0,3 - 0,5Ha	0,5 - 1Ha	>1 Ha	TOTAL	
Sumatera	233 842	7 138	3 722	2 261	1 929	248.892	29,9
Jawa	331 816	75 493	78 793	32 761	7 552	526.415	63,2
Bali-NusaT.	4 277	1 130	484	15	1 437	7.328	0,9
Kalimantan	15 992	4 485	1 846	883	223	23.429	2,8
Sulawesi	8 201	4 598	3 946	2 037	1 923	20.705	2,5
Mal. Papua	2 829	1 080	349	363	1 268	5.889	0,7
TOTAL	596.957	93.924	89.140	38.305	14.332	832.658	100
%	71,7	11,3	10,7	4,6	1,7	100	

Freshwater Pond Farmer

(Sumber: Diolah dari Statistik Perikanan Budidaya Indonesia, 2011) Tabel 3.2.8 Jumlah RTP Budidaya Kolam berdasarkan kategori skala usaha

Mariculture Farmer

Pulau	< 50 m2	50 - 100 m2	100 - 300 m2	300 500 m2	>500 m2	TOTAL	96
Sumatera	12.119	139	27	3	165	12.453	6,0
Jawa	13.938					13.938	6,8
Bali-NusaT.	4.947	36,576				41.523	20,1
Kalimantan	46.139	216	11	1		46.367	22,5
Sulawesi	24.461	7.999	8.975	9.729	24.916	76.080	36,9
Mal. Papua	17.170	499	200	728	38	15.943	7,7
TOTAL	116.082	45.429	9.213	10.461	25.119	206.304	100
%	56,3	22,0	4,5	5,1	12,2	100	

(Sumber: Diolah dari Statistik Perikanan Budidaya Indonesia, 2011) Tabel 3.2.6 Jumlah RTP Budidaya Laut berdasarkan kategori besarnya skala usaha

The Issue























General Aquaculture Issues In Indonesia

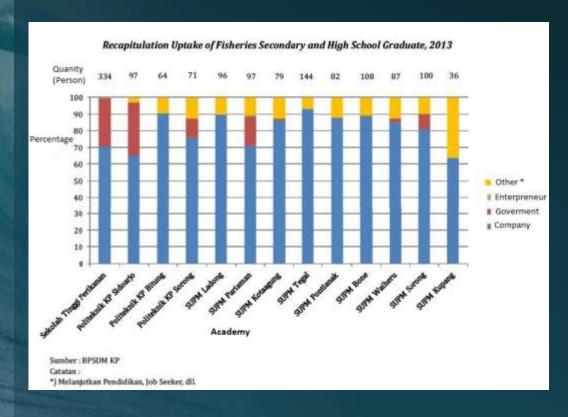
- 1. Unsupportive Investment Climate
 - A. Crime
 - B. Social Cultural
 - C. Investment Requirement



2. Perspective Toward Aquaculture

Fisheries is considered as a unprestigious and low income business by

majority of middle society in Indonesia





3. Lack of Extension staff

Comparison of farmer and extension staff

<u>Tabel 11.9. Sebaran Penyuluh Perikanan Menurut Provinsi, 2009 - 2014</u> *Table 11.9. Distribution of Fishery Extension Agent by Province, 2009 - 2014*

Satuan: Orang

Provinsi -		,	Kenaikan rata-rata (%)						
Province 200	2000	2010	2011	2012	2013	2014*)	Increasing average (%)		
	2009	2010					2009 - 2013	2012 - 2013	
Jumlah - Total	4.534	2.494	5.847	8.598	11.813	12.009	43,47	37,39	
SUMATERA	1.035	539	1.385	1.996	3.454	3.578	56,55	73,05	
Aceh	228	107	189	315	431	431	31,76	36,83	
Sumatera Utara	97	47	166	245	427	427	80,88	74,29	

category	Farmer count
Freshwater pond	832.658
mariculture	206.304
Brakishwater pond	197.400
Rice-fish	189.288
Cage culture	54.819
Floating Net	48.851
Total	1.529.370

Solutions

- Make a conducive investment environment to all stakeholder in fisheries sector
- 2. Have more extension staff for aquaculture
- 3. Socialize and promote aquaculture business to society in Indonesia.
- 4. Create awareness program toward sustainability need.

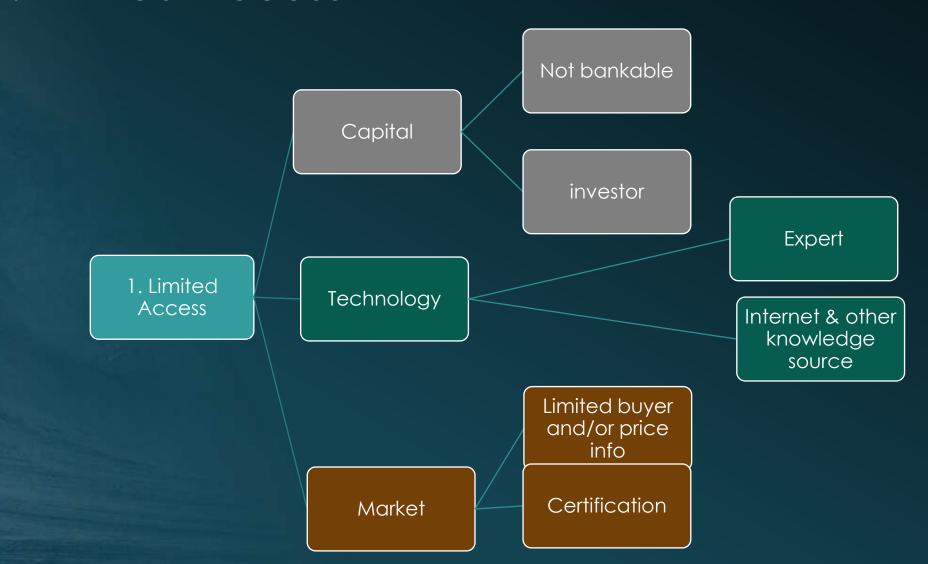


Poverty Issues





1. Limited Access



Small Scale Farmer Position

Aquaculture Input

Aquaculture Output

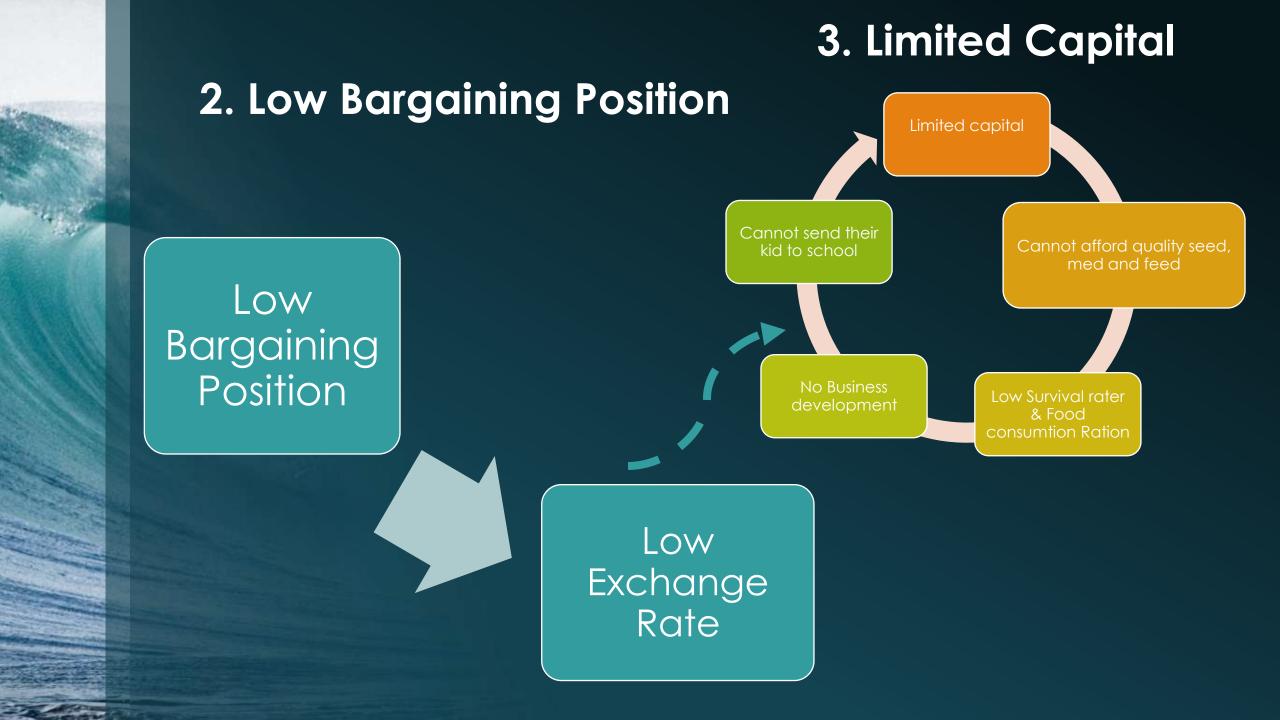
Feed Middleman

Seed Middleman

Farmer

Middleman

Processing
Industry



Recommendations

Associate / Group

- Not yet associate
- Weak group

Intensive Guidance and Training by Extension agent

Certification

- Increase commitment toward quality and responsible product
- A concern of the farmer toward social – environment issue

Credits

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Thanks!

Any questions?

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