



Marine Fishery Development and User Rights Management in Jimo (PR China)

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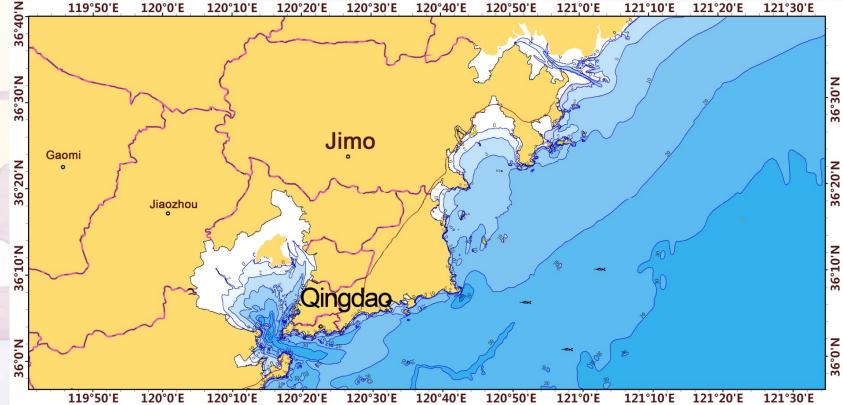
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5 Conclusions







- The Jimo territorial shoreline lies between 36°36′30′′N and 36°19′12′′N; and 120°46′03′′E and 120°38′15′′E (Fig.1).
- The eastern part of the city faces the Yellow Sea, encompassing 2,517 km2 of the Yellow Sea, with a coastal extent of 183 km.





Nature condition

- There are 10 natural bays .
- 28 large and small islands
- There are **15** fishing ports.
- 83.33 km² intertidal zone
- Jimo has excellent geographical location and abundant fishery resources.
- In 2017 the economic profit of fisheries were approximately 4.14 billion RMB. The capacity of marine fishing was 62,000 tons, accounting for 43.97% of the total fishing in Qingdao.







- Jimo was a country-level city of Qingdao which ranked 9th among the top 100 countries in mainland China in 2017.
- In 2012, Jimo's Aoshan Bay Community and Spring Community became the core sites for Qingdao's Blue Silicon Valley, as a central part of Chinese marine economic development policy.
- National Deep-sea Base
- the Shandong University (Qingdao Campus)
- the Qingdao National Laboratory for Marine Science and Technology





2.Development of the marine fishery in Jimo

2.1 Overview of fishery village, fishing port, fishery resources

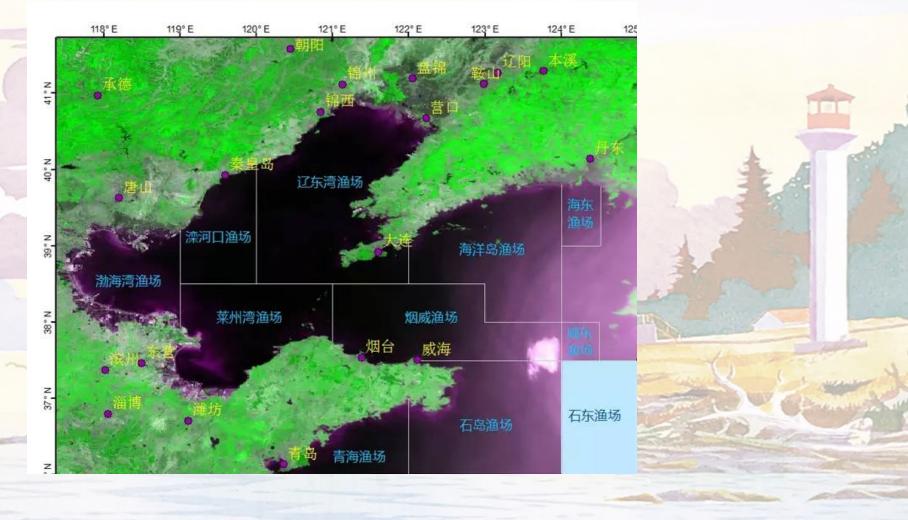
2.2 Fishery population and community status

2.3 Catches of marine fishing





2.1 Overview of fishery village, fishing port, fishery resources











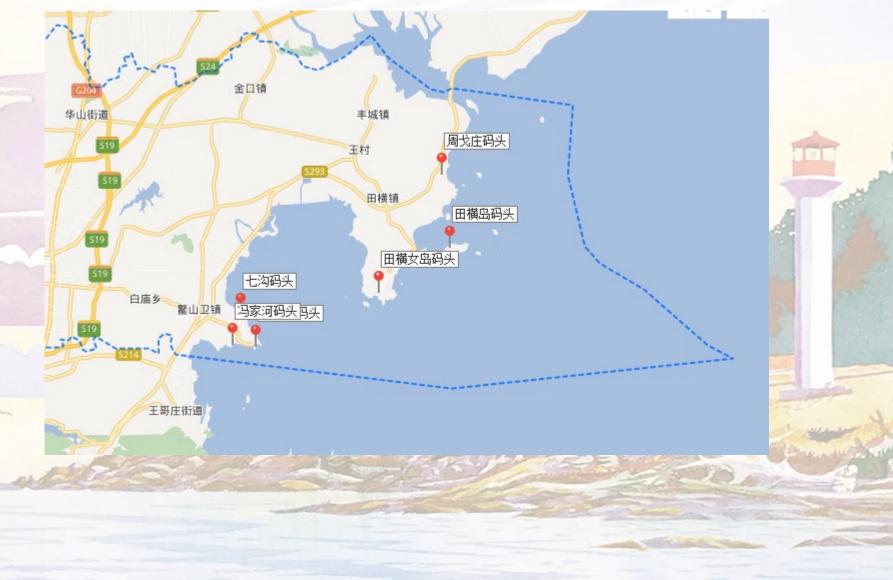






There are 15 fishing ports

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2.2 Fishery population and community status in Jimo District

- There are 5 coastal towns engaged in fishery production,
- Aoshanwei Town,
- Wenquan Town,
- Tianheng Town,
- Tianheng Island Provincial Tourism Resort,
- Jinkou Town

92 PICES 刘家庄 里店水库 《年格庄水区 东石格庄。 古坝街。 高格庄镇 平 〇前(保険) 家 0芝坊 东大格庄莱 ●店埠镇 夏格庄镇 岚西 西。由格庄 莱 市 阳日 市 •张戈庄镇 曲坊 6行村镇 羊郡镇 姜山镇 :坊镇 o望埠 0朴木 李权庄镇 度 菜阳盐场 南众水 08番 6中岛 Q前卫 (市 郭庄镇 赵戈庄白 孙家辛庄 章嘉埠 前张家庄 埠后。 0山汪庄 香岛 0大吕戈庄 北芦村 ●刘家庄镇 丁子咀 集王司 ▲野牛山 o北顏武 Q雄崖所 0东 氧 戈庄 移风店镇 0鸭岛 方戈庄Q o河西 王戈庄 姜戈庄 吴家岭 市 ○起戈庄 の店 金口镇 张家泊子 ् मि 0 甄家庄 0吴家屯 0泉庄 0于家庄 宫家大丈0 黄戈庄 山镇 の双瞳 O东百里 O杨家庙 店集镇 索戈庄。 O毛家岭 后港洪水 •丰城镇 O上泊 七大兰家庄 0鲁家埠后 **9**宅科 土埠岛。 后柘家白 0里栳栳 西桥 山镇 法家庄白 0高家庄 WHAT IS 迟家店子 南村镇 南渠 段泊岚镇 0黄宫屯 车家夼Q 付家 0东村/ 嘛 松树庄 大稻池 O杨戈庄 庄 灵山 福台岭 太祉庄 官路埠 E家庄 ILEO 龙瞳 6龙湾头 Q某位泉 小桥 •王村镇 程戈庄 李家町〇 段埠庄 西七级 o栗林 钱崮山 石泉庄 ▲267 0大桥 林发在 七级镇 小青岛 南岔河 沙戈庄 0江家屯 0扭河 抬头 大范戈庄 Q.长直 ?湍湾 泉虞 0黄虎庄 田横镇● 「王阳水内 力泡以 。埠西 青中埠 o满贡 太平港の水岛 大東南前海东 胶 普东镇 周戈庄 》张戈庄 •胶莱镇 泉庄o 温泉镇 西陆戈庄(横门湾 北安街道 车 挪城 任家屯 察里 ・ 田様五百文士 の西次 ・ 田様岛 ・ 日様島 ・ 日様島 -0北黄埠 丁哥庄白 岛 9郭庄 ○涨岛 •杨头 东塔子 0水泊 ▲ 山231 → 马山 蓝村镇 O时于庄 东九六夼 潮海街 0牌山 •龙口岛 9 窑上 它山街道 - 中、昭 210 O松树庄 山海 窗:洛-0 靈角石 黄 王家市 い女島 8 监山卫镇 崂 台子山の垛石 0七沟 拖车夼 ● 李哥庄镇 0 7 0红星 新民村 0山东头 海 盘龙石 ○魏家庄 棘洪滩街道 小岛湾 胶东镇 东台村 惜福镇街道 崂 即墨市 小管岛 14 75 阳 东水场 X 文武港6 城 贾家营。 地处本省东部,东濒黄海。面积1780平 兔子岛。 上马街道 山王哥庄街道 方千米,人口108万,属青岛市。东南部为丘

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1大管岛

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§马儿岛

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营海镇

后阳村

o红岛街道

517

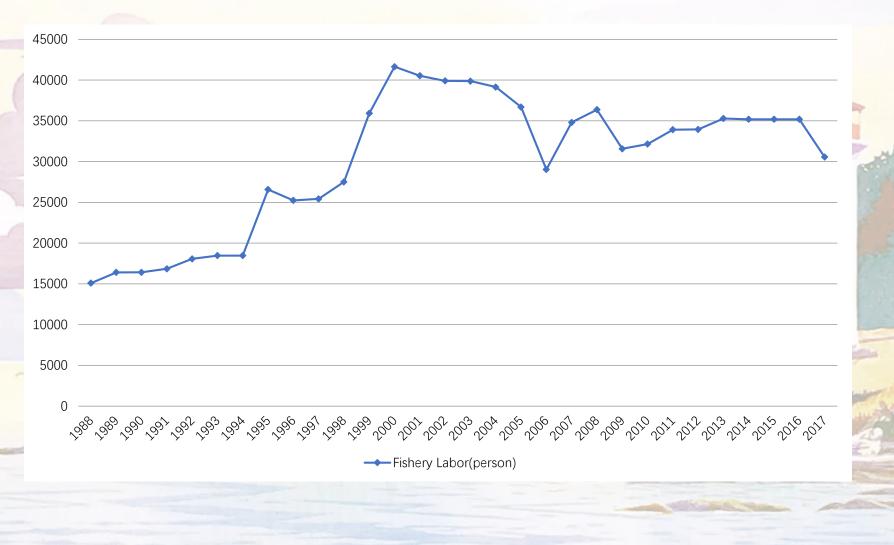
6宿流

西北部为平原, 地势由东南向西北倾斜, :酷暑,冬无严寒。盛产苹果,沿海产 鱼、虾、海参, 滩涂养殖业发达。即墨老酒、 花边素负盛名。胶济铁路与蓝烟铁路在市境西 南接轨。有田横五百义士墓等古迹。





Fishery Labor of Jimo Marine Fishing from 1988 to 2017(unit: person)







- In 2017,
- Jimo had 92 coastal fishing villages,
- 23,296 marine fishery professionals, which was 7.60% less than 2016
- 2090 females.







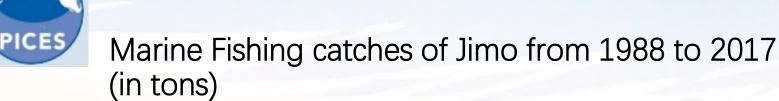
- The fishermen were mainly local villagers, who were inherited from their family.
- The wooden powered fishing boats were mainly small and medium-sized, and were owned by the captain.

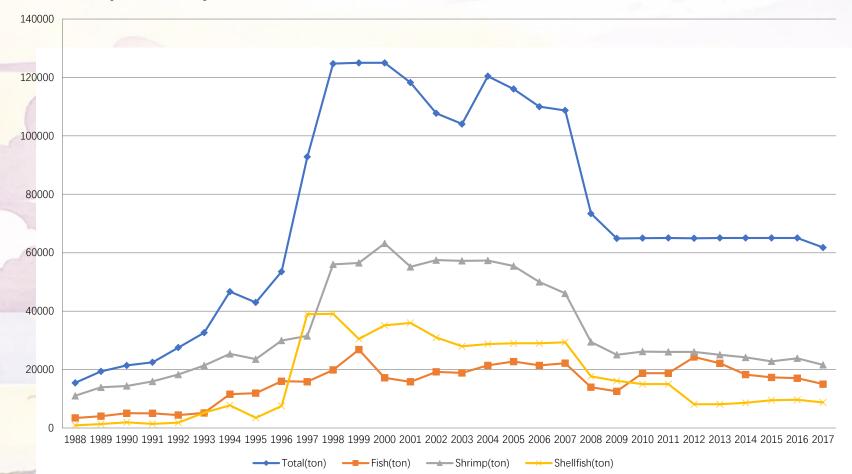








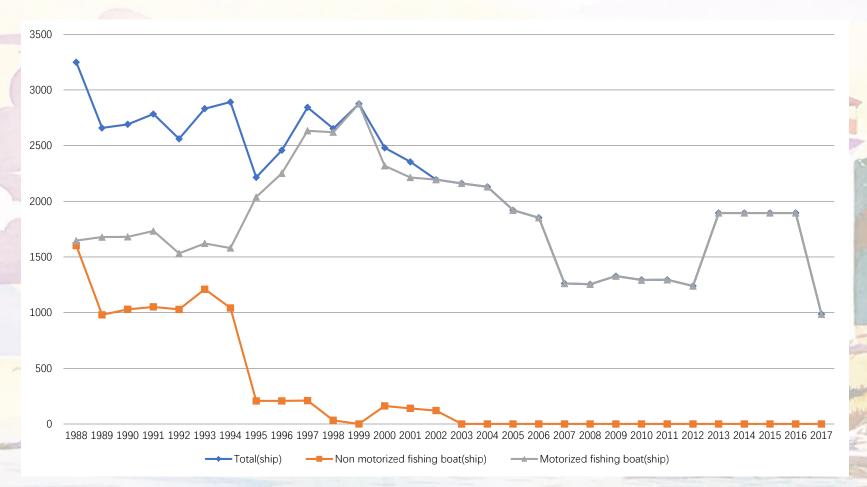








Number of marine fishing vessels in Jimo, from 1988 to 2017(unit: ship)







the total tonnage of the motorized fishing boat



and the	Year	Labor (person)	Total (ship)	No engine vessel (ship/ton)	Engine vessel (ship/ton)	Total	Fish	Shrimp and Crab	shellfish	algae	
DICE	1988	15099	3249	1602/660	1647/22041	15461	3462	11041	925	33	
FICE	1989	16408	2659	980/972	1679/24052	19395	4056	13950	1353	36	
	1990	16416	2691	1030/851	1681/22821	21444	5058	14412	1944	30	
	1991	16852	2784	1051/837	1733/22258	22517	5053	15970	1437	57	
	1992	18065	2561	1029/857	1532/23498	27550	4430	18323	1862	54	
	1993	18467	2832	1210/986	1622/17443	32637	5169	21407	5270	38	
-	1994	18467	2892	1042/884	1580/17578	46687	11587	25398	7780	24	
	1995	26574	2215	207/212	2038/26671	43000	11929	23588	3491	1	
	1996	25246	2459	207/212	2252/27622	53534	16025	29955	7554	—	
	1997	25429	2844	210/132	2634/30882	92817	15846	31522	38987	16	
	1998	27508	2653	32/32	2621/35354	124721	19871	56035	39108	30	
	1999	35922	2875	—	2875/43977	125000	26843	56521	30496	49	
	2000	41640	2481	162/280	2319/31216	125000	17189	63207	35129	25	
	2001	40536	2354	140/70	2214/35344	118233	15821	55181	35971	26	
	2002	39907	2195	120/60	2195/46305	107716	19235	57487	30970	24	
	2003	39875	2161	—	2161/50890	104075	18865	57224	27955	31	
	2004	39151	2130	—	2130/16560	120426	21430	57340	28758	36	2
	2005	36694	1920	—	1920/14822	116034	22766	55461	29001	36	
	2006	29028	1852	—	1852/13476	110000	21438	49987	28990	—	
~	2007	34815	1262	—	1262/13843	108693	22186	46096	29353	—	
	2008	36370	1255	—	1255/9190	73398	13971	29468	17662	—	
	2009	31568	1328	—	1328/11660	64896	12561	25081	16129	—	
	2010	32148	1294	—	1294/11382	65002	18752	26186	15035	—	
	2011	33917	1295	—	1295/11558	65048	18752	26071	15039	—	
	2012	33947	1239	—	1239/11734	64948	24318	26071	8138	—	
	2013	35287	1895	—	1895/11325	65048	22145	25071	8138	_	
	2014	35192	1895	—	1895/11325	65048	18293	24171	8638	—	







3 Management of Marine Fishery in Jimo

3.1 Marine Fisheries Management Administration

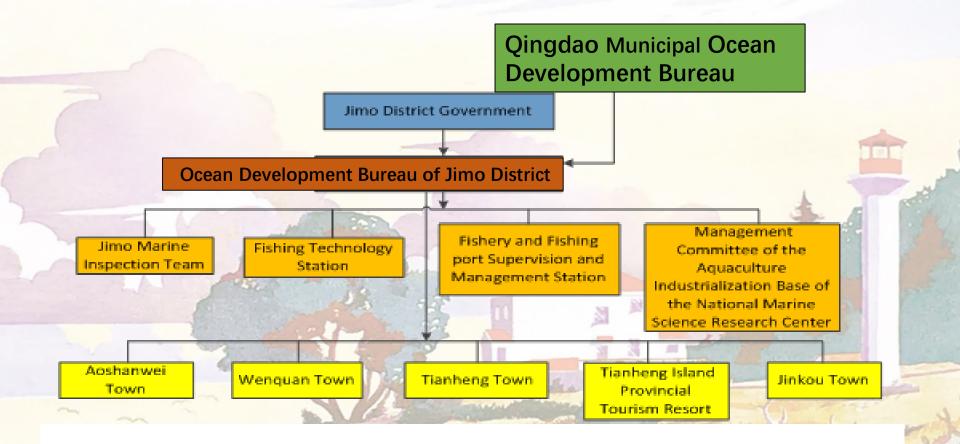
3.2 Management of marine fishery user rights

3.3 Other marine fishery management policies

3.4 Fishery monitoring and controlling



3.1 Marine Fisheries Management Administration of Jimo



Administration relationship of the Jimo Oceanic and Fisheries Bureau

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3.2 Management of marine fishery user rights

3.2.1 Fishery user rights management based on fishing license 3.2.2 Fisherman's qualification certificate is a threshold for fishing





- A fishing license is approved by the Chinese government for fishermen to engage in fishing operation.
- China initiated to implement the fishing licensing system in 2002.
- The licensing system includes fishing license, ship inspection certificate, and ship registration certificate.
- The government promoted the "three certifications in one" reform, implemented the reform on fishery inlands by 2016, and carried out the reform research of "three certificates in one" in small-sized fishing vessels.





- A license certifies the type of operation, territorial area, the time limit, the quantity and the specifications of fishing gear, fishing species.
- Regarding species or territorial area, as for the area of fishing quota management is implemented, and the fishing quota should be approved on the license.





- The validity period of a fishing license is 5 years
- annually reviewed
- In 2007, the" property law" declared the rights of fishery farming and fishing rights as a usufructuary right, which is of great significance for protecting the legitimate rights and interests of marine fisheries





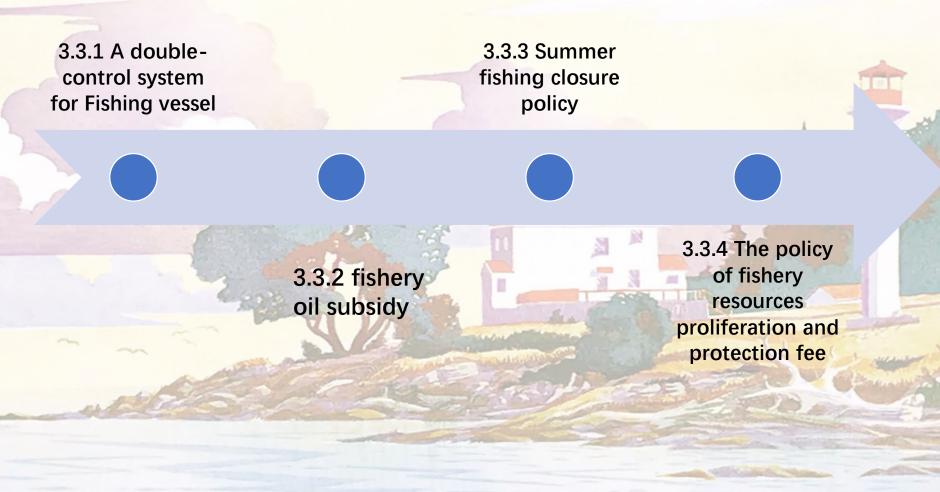
2.Fisherman's qualification certificate is a threshold for fishing

- "The Regulations on the Issuance of Marine Fisheries in the People's Republic of China" divides the fishery crew into crew members and ordinary crew members.
- The crew members are the drivers, engineers, electricians, and radio personnel.
- All of them need corresponding certifications to working on a fleet according to the regulations.





3.3 Other marine fishery management







3.4 Fishery monitoring and controlling in Jimo

- Fishery and Fishing port Supervision and Management Station
- The 14 kinds of illegal activities are deducted from the fishing oil price subsidy, of which 6 kinds of illegal acts are deducted all annual oil price subsidy, and 8 kinds of illegal activities are deducted below 70% oil price subsidies.
- Each community has 1 fishery assistant who was directly under the leadership of the Jimo Fishery Supervision Station.
- The fishing station is also responsible for the safety inspection of fishing vessels during the fishing closure season.
- fishing vessels have had fewer accidents,
- The compensation is paid by insurance.
- fishery vessels is required to fishing on the sea in team (at least 3)





4.The challenges facing by the management of Marine Fisheries in Jimo

4.1 Illegal operations of other province fishermen across the provincial sea territory

4.2 Land occupied by project development 4.3 The contradiction between fishery management policies

4.4 No young generation willing to engage in fishery

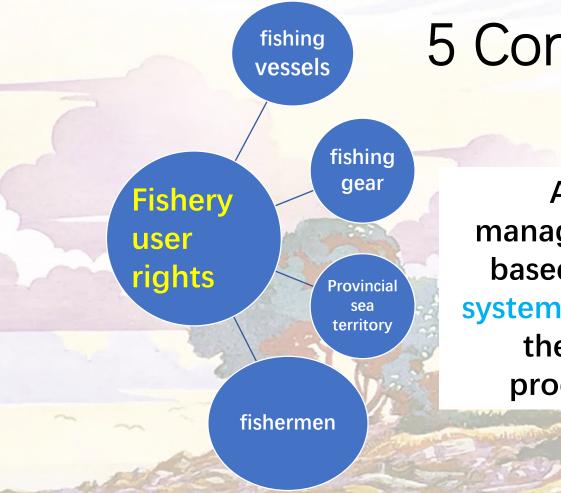




4.4 Management Recommendations

- 1) expanding the fishing permit system, implementing a 'double control' system for fishing vessels, reducing fisheries fuel subsidies to commercial fishery;
- 2) expanding the fishing summer closure and reducing illegal fishing during the this period;
- 3) developing other legal ways of fishing (eg. recreational fisheries, hand picking) to supplement fishermen income during the summer closure;
- 4) developing an offshore maquaculture industry to increase the supply of seafood and reduce fishing pressure on coastal resources;
- 5) administrations should strengthen monitoring and controlling to reduce cross regional illegal fishing;
- 6) increasing the protection and restoration of coastal fishery resources.





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5 Conclusions

A fishery user right management mode mainly based on fishing licenses system was established from the aspect of fishery production input side.





500 years Jimo Sea Sacrificial Ceremony



















 This research - "User Rights Management in Jimo" was a case study of China

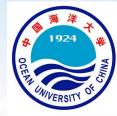
----For the "Tenure and user rights in fisheries 2018 FAO" conference











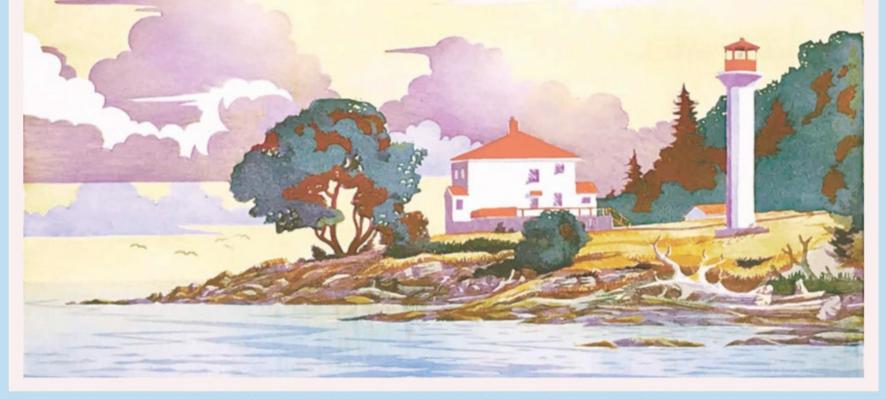
This paper will be published on the "Proceedings of the Tenure and user rights in fisheries 2018"

by Department of fisheries and aguaculuture, FAO in November 2019



Thank you

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Active Pase, 18" x 13", woodblock print, 1997. By Graham Scholes, Sidney, B.C., Canada. Right to reproduce this image was generously granted by the artist.

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