

## **The Note on the Economic Structure of Batan Island in Philippines.**

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### **I Social Outlook of Batanes Province**

#### **a Geography & History**

The Batanes group of islands is located about 100 miles north of the Luzon mainland. Of the islands the largest and most economically important are Batan, Itbayat and Sabtang. These islands are bounded in the north by the Bashi Channel which is the territorial boundary of the Philippines, to the west by the China Sea and to the east by the Pacific Ocean.

The topography of Batan island is generally mountainous on the north and southeast with a basin stretching in the interior. The terrain of island is hilly and rocky so that most of the farms are on the hillsides.

It is raining throughout the whole year, with the rainfall fairly evenly distributed. From July through October, this becomes the province most exposed to typhoons, owing to its exposure to tropical cyclones as it is in their path and unprotected. This of course is a handicap to the economic development. The highest monthly average temperature is 84°F in June, and the lowest average is 69°F in January.

The currents around the islands are so swift and dangerous that small boats may sometimes be carried by the currents to the open sea. The coast is fringed with rocks so that large commercial ships can not ride along at the beach even at

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Basco, where a port was constructed.

In 1686, the two Dominican friar missionaries who landed to survey the place and to preach the Christian faith, found the people dwelling along the hills forming two tribes warring. In the vicinity of what is now named Basco, there were about 10,000 people under several tribal chiefs. This is the number about the same with that of the present population of the province.

The Dominican Missionaries undertook colonizing, civilizing, and even Christianizing the Ivatans, who in turn offered root crop, tobacco, and even goats and pigs fostered by the tribes. Afterward, in 1782 the Spanish Governor instituted a country-wide tobacco monopoly, sending an expedition to Batan to investigate the tobacco-growing possibilities.

The people referred to the place as Basay and sometimes Batan. The population of Basco came to be known as Basay, and the entire island as Batan Island.

In 1909 the first American Governor took formal possession of the civil government of the island. At present the province has 6 municipalities having with Basco as its capital. Each town is composed of some barrios headed by barrio captain. Basco, Mahatao, Uyugan and Ivana are situated in Batan, and another set of 2 towns are Itbayat and Sabtang.

### **b Population & Economic Status**

According to the latest census, Batanes is the only one province that showed decrease in population. In 1960 the census Bureau reported a total 10,309 souls in the province of Batanes, a decrease of 396 or 3.7 percent from the 1948 population of 10,705 souls.

In 1794, Batanes had already the population of 16,000. An epidemic in 1810 reduced the population in that century. And at a very early date, the people began to migrate to other provinces. The first was the attempt by the Dominican friars to relocate the natives in Calayan. That was before the Province became a part of the Philippines.

During the Spanish period, people migrated from Batanes aboard the "*Pontines*" which brought supplies for the government and the mass.

After the war there was a substantial migration to other areas seeking better employment opportunities. Some of them were resettled to Mindanao by the National Rehabilitation and Resettlement Administration project.

The following table shows the distribution of the population by municipalities in 1960. About 60 percent of the population of Batanes-province is located in Batan Island.

Municipality	
Basco	2,868
Mahatao	1,242
Uyugan	1,029
Ivana	1,039

Itbayat	2,365
Sabtang	1,766
Total	10,309

Source: Bureau of the Census and Statistics.

The economy of the province is dramatically shown by the fact that in 1960, 3,900 persons were estimated to be engaged in farming and 270 in small fishing, forming nearly 42 percent of the population. Approximately 70 persons are engaged in wholesale and retail businesses, about 400 being government employees.

Then, Batanes, primarily, is a land of small farmers, and fishermen, supplemented with craftsmen, pottery makers, and nipa raincoat weavers. The average Ivatan is an independent farmer who owns a small farming field on which he has his home, planting root crops and raising vegetables and fruits. Because of the remoteness of the area, it is not surprising that in the interest of self-sufficiency, most families should own dairy animals, cattles, pigs and poultry sufficient for their maintenance.

Reference data:

Desirable customs and Undesirable practices in Batanes; Bureau of Education, Division of Batanes; Sept. 1947.

Report on the Economic Survey of Batanes;

National Economic Council, Industrial Development Center, Manila; Feb, 1963.

Census of the Philippines; (Population and Housing); Bureau of The Census and Statistics) 1960.

## II Production Patterns of Rural Industries

### a Three fields Farming

The landholding of the family consists of small patches of farm scattered in several places. Root-crops like camote=sweet potato, ubi=taro, tugi=yam, onions and garlic have different planting seasons, hence the monthly food of root-crops forming the staple food of the people varies according to the harvesting time of each crop. If the standing crop is destroyed by a typhoon, then the food is supplanted by the rice imported from Manila, Laoag and Apparri.

Principal crop is sweet potato (20 Kilos cost ₱ 0.50), because 3 months after planting can be commenced, lasting up to 9 months.

Agricultural Crop Production By Kind; Batanes Province 1959

	Area (ha)	Quantity	Value	Crop Value per. hect.
Total	3,310	10,978,100 Kgs.	₱999,200	₱302
Palay	110	700 cav	8,400	76
Corn	800	13,000 "	110,600	138

Fruit & Nuts	395	664,600 Kgs.	75,700	192
Citrus	25	13,000 "	5,100	204
Root Crops	1,600	9,296,000 "	681,300	426
Camote	660	3,281,900 "	164,100	249
Cassays	10	48,400 "	1,900	190
Gabi	50	240,500 "	19,200	384
Tugui	140	641,200 "	38,500	271
Ubi	820	5,084,000 "	457,600	558
Vegetables	75	135,800 "	102,700	1,369
Commercial Crops	240	43,000 "	10,900	45

Source; ABD, DANR,  
 Palay rice 47 Kgs per cav  
 Corn 57 "

Other crops planted are Ubi, Rice and Tugui. Ubi can be harvested 6 months after its planting, and once harvested it becomes useless.

Much Rice is not to be planted because of typhoons. Rice is planted in January and harvested in May. There is no irrigation system. After Rice they plant sweet potatoes in June and harvest it in November.

The people of Basco prepare to buy Govt. Rice at ₱1.30 per ganto=2.2 Kilos. Sugar canes are planted to produce native wine called "Basi".

Ubi, camote, tugui, and gabi are grown by almost every family for home consumption. They are used as substitutes for rice or corn as staple food.

As to a total area in Batan, in 1960 there was 1.9 hectare per capita, in comparison with 1.1 hectare average per capita for the Philippines overall. Basco the capital has an area of approximately 2,400 hectares and its population density is 1.2 hectare per capita, which is about the same as that of the national average.

The farmers cultivate small pieces of land (about 1,500 square meters=30m × 50m), as they plant different crops.

They do not use fertilizers, instead, they use crop variation in order to maintain the fertility of the field.

By the crop-rotation farming, a farmer divides his land into 3 parts, planting trees called "*Talisay*" from which he gets oil for light. In the first part reserved for the pasture and next planting, he plants beans which are left unharvested to be used as fertilizer, and then in the next year, the second part, and in the third year the last part is brought into cultivation successively.

Also, he has no facilities of irrigation except the rain water. At Comote farm mixed with Ubi, he does not make even ridges.

It may be worth of attention that the farm divided three in Batan is much the same with European farming system since the Middle Ages.

## Diverse Field and Crop rotation Farming

Sweet potato	Ubi	Reserved for next Planting (Vacant farm)
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**b Cow pasturage**

The cattle number is almost equal to the human population of Batanes, counting 10,300. Cattle raising is one, if not only, of the most important sources of cash income for the majority of the people.

It might be a very promising and profitable industry in the province because of the high availability of openlands convertible into pasture lands.

Bulls (Male cows) are ordered by the Govt. from Australia, India and other countries, and then guidance is given to the cattle raisers by the Govt. Authority. Average Bulls are ordered from Manila to Basco 6 heads a year.

Cows butchered in Batan are of the poor quality (thin or slow in growing). Those of Good qualities are preserved for sale in Manila.

In case when a person cannot buy cattles for all his wishes to have some animals, he has to ask from those persons having some cows, carabaos or horses, preferably females. He takes good care of them. The first offspring is his share, the second belongs to the owner of the animal, and so on, alternately. If, bad luck would have it, the animals failing to breed, and they decide to butcher it, the borrower receives one-fourth of the butchered animal as share, and the owner gets three-four.

## Poultry &amp; Livestock population; Batanes Province 1959.

Carabao	1,350 head	Goats	810
Cattle	10,000	Sheep	110
Horses	250	Chickens	44,300
Hogs	8,000	Ducks	/

Source; ABD, DANR

(Carabao is not sold for food, but for work in farm, at ₱150-200.)

A family raises an average of 5-6 cows a year weighting 200-300 kilos, and costing ₱200-600 per head.

If there are no root crops planted the family cows are to be kept in the farmers farm, else, the cows are kept in the communal pastureland.

There are four large stock breeders at Basco who own more than 100 hectares of pasture land. The largest cattleman has 500 heads of cow and 40 members of cattle-tenant at Batan only. He lives in Manila and carries cows by his own boat.

The other members are Mayor of Basco, Superintendent of public school, and former mayor of Basco who manages now the sale of groceries, dry goods, and hardwares.

They own about 200 cows and 10 tenants, but are not middle men of cattles.

At Mahatao, there are two large cattlemen, the one owns more than 100 cows and 30 hectares of pasture lands. He also is a middle man of cow-dealer for Manila. The other owns somewhat less than 100 cows, 20 hectares, and is a middleman of cow.

Cows are sold alive, transported by ships calling at the island 3 or 4 times a year, with 600-800 heads carried per ship, and the number is to easily increased to serve outside markets if shipping cost permit.

In the case of Mahatao, cows are sold only when a business man comes from Manila. There are three middle men (including above two cattlemen), who go around the town and ask cows for sale. They work as a middle man for 2 months a year, then for 10 months, they work as a farmer and a fisherman.

The middle man receives commission ₱5.00 per cow, but cannot borrow funds from business men. They just survey the number of the cows to be brought, and pay the prices by cash on delivery system.

Cows in Mahatao are sold from ₱200 to ₱400, according to their size. Business-man comes two times a year during the good weather term.

There are 4 middle men at Basco who receive commission ₱10.00 per head from buyer.

### **c Labor-intensive Fishing**

Although fishing is an important industry Batan Is. has no fishpond or deepsea fishing. Most of the surrounding waters contain good fishing grounds within one hour rowing from the sea-shore.

Operations, however, are on a small scale basis. Some of fish caught by local fishermen are sold in the local market, but no data are available on the amount of fish caught in Batan.

Fish are caught not only for family consumption but for sale. About 270 "TATAY" = small boats operate during the Fishing Season in Batan.

During the fishing season from March to June, almost all farmers become fishermen and when fishing season comes to its end, fishermen become farmers.

Fishermen's age covers 15-65 years, and they can transfer from one fishing boat to another without any trouble.

While fishing, fishermen catch fish for about 16 hours a day. If they catch flying fish at night, they still catch "ARAYO" = tuna in daytime. The fishermen catch fish every day, as long as their physical conditions can endure.

The most popular fish is flying fish 30cm long in average. Flying fish is caught at night with lantern and handnet.

One boat = TATAYA (3.5 meters in length and no motor) has three fishermen, two of whom paddle and one uses the handnet. Average catch per boat is 550 fish a night. Flying fish is sold at ₱0.50 per a fish during the period from March to April, and at ₱0.25 during May and June, but there is no market at Batan, and people go to seashore to buy fish with money or rice or wine.

Catch is to be divided as follows

- 1 part for boat
- 2 part for lantern and net
- 3 part for 3 fishermen each equal

Tuna=*ARAYO* are caught at day time by hook and line of various sizes. The small one is about 20 meters long with one or two hooks, and the large one is 90 meters.

As bait is used alive flying fish or shrimp and sometimes a piece of meal of coconut or crab. Average catch per boat is 10-20 fish per day, selling price is ₱5.00-8.00/fish.

Another popular catching tool is Spear-Gun of 1.5 meters or 0.5 meters in length, which is made of wood, and attached rubber string for promotion power, together with iron spear of 1.5 or 0.5 meters. Fisherman swims under the water 9-12 meters deep, and shoots at fish 3-5 meters or 2-3 meters away.

A strange fishing tool named Flying-net is used only in fine weather, when the sea is calm and no wind. The net is made of cotton thread about 2mm with a mesh of 2 cm. The net around 3 meters long and is around 60cm at the center and about 30cm at the ends. The net is attached to two bamboo poles about 3 meters long. At the bottom side of the net are attached leads 30cm apart. The fisherman holds the two ends of the bamboo and drives down to the sea where he sees fishes, and then flings his flying net over the fish. Fish caught are as the following

<i>GUTGUTAN</i>	15cms long	6-7cms wide
<i>KUBAHAN</i>	15	6-7
<i>ALI</i>	10	2-3
<i>TSIDAT</i>	10	2-3

Batang-Net is a drift-gill-net of 100 meters in length and 1.8 meters in height, and is used to catch "*Parayan*" of average 30cm long.

Fisherman have inherited the skill of making Batang net from their parents. At present there are about 20 nets at Uyugan solely. Thread is brought from Manila, but before the war they used local fiber in Batan. It takes ₱200 and 15 days labor to make up a net with the thread.

The operation is jointly managed by 9 fishermen in each "*tataya*". They set the net in daytime and swim to drive fish to the net. Average catch is 100 fish a day, reaching 50 days work in a year. The catch is to be divided into 10 parts, one share is for the net, the other share is to each fisherman.

In Mahatao the largest fishing equipment is only one Basket net. The first Basket net was made in 1936, lasted up to 1957, in imitation of a Japanese fishing net, by the Fishermen association with 18 members mentioned at the next chapter. The association made another one in 1957 and it is still used at present. The cost is around ₱200 now.

The net has a thread basket with a frontage of 3 meters and two lead-ropes of

10 meters with sinkers attached on both sides. The ends of the ropes are kept up by two big "tataya," each tataya is managed by 9 fishermen. In daytime, they go to sea front, 100 meters from seashore, 10-18 meters deep, then spread the net in following of the current. Almost all of them swim and drive fish to the net.

Catching fish is done before one-four of noon and after one-four of noon every month, provided the weather is fine. If a fisherman cannot go out fishing, he looks for a substitute, to take his place, with the permission of the other members.

Fish caught is divided into three parts. One part is set aside to be sold and the money goes to the treasurer of the association to cover the expenses of the net, while the 2 parts will be divided among the 18 fishermen. The fisherman's share may be sold or brought home for family consumption.

As above mentioned, these relatively large scale of nets are operated through the combination of hard labors to round up, and drive to net the fish while swimming. This sort of intensive labor-system is not to be seen in any other provinces.

### III Land ownership and Regional Cooperation

#### a Feature of Tenant System and Communal Regulation.

Historically speaking, Batanes belongs to a few provinces where the greatest percentages of the farm is operated by full owner, and tenant systems have not developed.

When father die, field is divided among wife, sons, daughters (single and married) equally. But one may buy the share of others usually. As the result of this custom buying and selling of farms are limited only to rare cases.

There are about 230 hectares of cultivated field in the town of Mahatao, but there are no landlords and tenants. The case of Uyugan and Ivana are similiar to that of Mahatao. The tenant system in Batan exists mostly in the cow raising. Besides the few big cattlemen above mentioned some middle class cattlemen own scores hectars of pasture and considerable tenants.

The tenants are permitted to cultivate a parcel of land, and the harvest will be for tenants if only without rent, but they have to breed cows and grow pastures, belonging to the landowner.

In Batanes Province, there are some Govt. owning pasture lands, where farmers can let their cows eat grass. The Fee is ₱0.50/cow a year. This is under the supervision of the PACD.

#### Govt. owning pasture land in Batanes

town	area (hectares)
Basco	141.0
Mahatao	168.0

Ivana	252.0
Uyugan	278.5
Sabtang	144.0
Itabyat	265.0

The majority of Govt. owning pasture lands are utilized as communal pasture. For instance, 100 hectares are managed by municipal council in case of Mahatao. Cow-owner does not pay for the cow-stay in communal pasture land, but he has to do work every Saturday, such as making fences, removing unnecessary trees, thus the grass grow more.

The communal pasture land is under the supervision of the municipal council and managed by a deputy. The deputy is elected every year by the members among around 100 cow-owners, and whom they call president or "*Cabisilya*".

Any cow owner can bring his cow to the communal pasture land, becoming a member of the association. A member can have as many cows as he likes but he does not pay for cows-stay. A member works every Saturday regardless of the number of the cows he may have inside the communal pasture land.

Reference: Land Area and Vegetative Cover by Category. Batanes Province, 1959

	Hectares	Percent
Total Land Area	19,780	100.00
Forest Area	5,920	29.93
Commercial Forest	(3,740)	(18.91)
Non-commercial Forest	(2,180)	(11.02)
Open Land	4,310	21.79
Cultivated and other Land	9,550	48.28

Source: Raw Material Resources Survey Bulletin.

Classified (total)	19,780	100.00
Alienable & Disposable	5,650	28.56
Timber land	14,130	71.44

The other communal regulation is Regional joint labor at farming. During planting season the older members of the family join the "*Payohuan*" (meaning helping one another). The members of this organization, take one half day, in rendering planting services to a member, and the other half of the day to another member, until all the members have had their turn of the services of their fellow members. This organization lasts only for one planting season.

Another sort of "*Payohuan*" is the "*Kayvavanan*" (meaning friendship) with at least 20 members. The members render free labor once a week to a fellow member. In the following week, another is the recipient of their work, until the members have rendered, in turn, the services of others.

### **b Mutual Use of Fishing Ground**

There is license fee for fishing to be collected by municipality. Fishermen pay ₱0.60 per person, ₱0.50–1.00 per boat in Mahatao, and ₱1.00–1.80 per boat in Basco etc.

But the inshore fishing ground of Batan is used mutually amongs respective towns. For example, when the fishermen of Mahatao went to the fishing ground at their town, and caught few fish, though plenty catch of fish was done in Basco, Ivana or Uyugan on the same day, they catch fish the next day in Basco, Ivana or Uyugan. When a fisherman from Mahatao catches fish in Basco or in other towns, they have to pay another fee of license as a fisherman for that town. The fee goes to the municipality, it being paid to municipal treasurer.

Of course there is no visible boundary of municipal territorial water among towns on the sea. There are only land marks. That is why fisherman fishes beyond the territorial water of next town, not knowing it himself.

Now, there is one Fishermen's Association in Batan. The Fishermen Association was formed with 18 members in 1946 at Mahatao, as follows. During that period, there were very few fish in the town and they could not catch fish with the kind of nets they were using. It so happened that a Japanese fishing boat was caught by the Govt. Authorities against illegal fishing. The Japanese Fishermen were able to catch plenty of fish, and the Filipino fishermen found out that the Japanese used different kind of net, which was copied by them.

Because of the cost of the fishing net, one fisherman cannot afford to have one set, so, 18 fishermen in Mahatao bound together to form the Fishermen Association. The average age of the members was 35–40 years.

The new fishing net the Mahatao fishermen's association possesses through the imitation from the Japanese, is called a Basket net as above mentioned.

At present, there is a fear of dissolution because they have had a hard time.

## **IV Typical scales of Farm Household.**

### **a Tenant**

Mr. Villarin is 26-year-old tenant living in Basco. He supports 4 children and a mother. He and his wife cultivate 2 pieces of land 1,500 sq.m each, with one carabao which has been borrowed from his relatives. The duty of tenant is to raise the cows owned by the landlord.

His cash income a year is ₱200 only by part-time wage, therefore his family can not buy always fish or meat. He cuts tree for fire wood from the public owned-forest in the nearby mountain, sometimes he asked permission from persons who owned trees, and cuts fire wood for home consumption.

When asked whether he had any hope to change job at anyplace, he just laughed and said that he was contented with his present livelihood, because he had never

been to school.

**b Owner Farmer**

Mr. Cabugao is about 40 years old, lives in Uyugan with wife and 2 daughters. He cultivates two pieces of farm, one is more than 1 hectare and the other is less than 1 hectare.

Crops are Ubi and Gabi from January to March. Sweet potato throughout the year, and Garlic and Onion from October to November. Sugar cane is to be planted in February, and after one year it will be harvested for wine.

He has 6 cows, 2 carabaos, 1 horse, 4 pigs and 12 chickens.

The item of cows is as follows, 1 head is 3-year-old bull of foreign breed costing ₱500. 2 heads are females used for breeding and milking, 3 heads are small cows.

And also he uses the following fishing equipments.

A Hand net; to catch flying fish

A Spear gun; to catch all kinds of fish

A Flying net;                    "

A Batang net; (joint possession)  "

A Tataya;

**c Landlord**

Mr. Abuyu ex-mayor of Basco lives with his wife, a daughter (married), and the youngest son. 3 elder sons are married and keeps each house independently.

He is a cow owner=landlord as follows. 40 cows (30 mother cows, 2 bull, 8 small ones), 80 hectares of pasture land and 7 tenants.

In 1963, he sold 3 cows costed ₱150, 300, 400, but his main income was got from the commissions of cows as a middle man.

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