

Planning on Primary Health Care toward Remote Islanders

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1. Preface

Comparing betterment and improvement in the fields of economics, health care, public education etc. in the urban areas, it is true that less development in these fields more seen in the rural areas. Especially in the remote mountainous villages and islands far less development was shown apparently. Nowadays such underprivileged residents began to recognize their needs and demands for health care and also the governmental effort began to orient toward implementing better health services for them.

In this study only 337 islands in the South-West region out of total 516 inhabited islands were taken in the planning (Table 1). However, the planning focused on the remote islands from distance-wise and transportation wise from the land shore.

After the fact-finding survey through an analysis of available data and observation tour by specialists in the health field and community development the following planning was proposed to the relevant organization and agencies.

Table 1. Number of islands by region and size of population, Korea(S)

Population	West sea region	South west region	South region	Total (%)
- 99	33 (37.9)	148 (43.9)	33 (35.9)	214 (41.5)
100 - 499	34 (39.1)	101 (30.0)	32 (34.8)	167 (32.4)
500 - 999	8 (9.2)	39 (11.6)	12 (13.0)	59 (11.4)
1,000 - 4,999	8 (9.2)	28 (8.3)	14 (15.2)	50 (9.7)
5,000 - 9,999	4 (4.6)	16 (4.7)	1 (1.0)	21 (4.1)
10,000 +	-	5 (1.5)	-	5 (1.0)
Total	87 (100.0)	337 (100.0)	92 (100.0)	516 (100.0)

* Journal of Islands, Ministry of Internal Affairs, 1984

2. Purpose and plan of the study

- (1) Carrying out the community baseline survey in the sampled islands
- (2) Observation on health service in detail for the primary health care

(3) Proposing desirable health care delivery system to remote islanders with the comprehensive community development

With the above described purposes, the planning for 3 years(1987, 1988 and 1989) in the future was devised as follows :

- (1) Education for community leaders
- (2) Health care improvement
- (3) Improvement of the living environment
- (4) Income-generation trial
- (5) Credit union operation

3. Study areas

(1) Geography and transportation

This study area is located in the South-West Region of the country and covers three townships (H-, S-, C-Myun of SA-county= Gun) including 19 inhabited islands. From the capital city Seoul it takes five hours by an express highway bus(550 km) to reach the closest port city to this study area. From M-city one can take a hydrofoil boat and travel to the three -Myun areas in two hours, or one can take a regular passenger boat and arrive at H-Myun in four hours. The distance to H-Myun from M-city is 45 nautical miles.

(2) Population

Table 2. Population in the study area

Township (Myun)	Population	Houses	No. of island	Remarks
H - Myun	1,428	1,436	9	
S - Myun	4,601	933	4	
C - Myun	7,251	1,306	6	
Total	18,280	3,675	19	

(3) Important industries

Table 3. Important industries in the study area

Township (Myun)	Dry farm (km ²)	Wet farm (km ²)	Non - arable land (km ²)	Salt flats (km ²)	Households engaging fishing
H - Myun	1.36	2.04	6.92	n.a.	na.
S - Myun	5.00	2.70	19.60	5.5	2.07
C - Myun	6.52	4.52	13.60	n.a.	4.6

n.a. = not available

At the township(Myun) level there is a health sub-center staffed by a government-appointed doctor charged with health care; however, his activity is limited. Also, there is a health dispensary in each township staffed by a health nurse. Therefore health activity in these dispensary is limited.

(4) Educational institutions

Table 4. Education institutions in the study area

Township (Myun)	Kindergarten	Elementary s	Jr. high s.	Sr. high s
H - Myun	—	2	1	1
S - Myun	1	7	1	—
C - Myun	—	2	1	—
Total	1	11	3	1

(5) Medical and health facilities

Table 5. Medical and health facilities in the study area

Township (Myun)	Health sub-center	Health dispensary	Pharmacy	Drug store	Oriental med. shop
H - Myun	1	1	1	2	1
S - Myun	1	1	2	2	1
C - Myun	1	1	1	2	1
Total	3	3	4	6	3

4. Study results (fact finding)

It is recommended by many experts that the integrated projects such as education of the community leaders, health care improvement, improvement of the living environment, income-generation, operation of credit union etc. should be together implemented in the community development. Among these projects, health care for islanders is considered as the most urgent in this study, even though the islanders (villagers) do not recognize as urgent a need as their overall economic improvement. Results of some prominent projects done during the past two-decade in Korea gave this study beneficial recommendation.

(1) Current health situation (H-Myun as a sample)

a. Existing health facilities

1) Health sub-center

Manpower

Equipment

1 M.D. (3-year-duty)

new building

2 Dentist (3-year-duty)

simple therapy equipment

3 Nurse-aids (1 female, 1 male)

(no X-ray, no laboratory)

Motorcycle

2) Health dispensary

Manpower

Equipment

1 PHN (community health practitioner)

very simple therapy kit

b. Relations between islanders and health workers

1) Utilization of health facilities by islanders

* No. of out-patient : very few

- * People prefer visitation by doctor to home or village than patient's visit to the clinic
- * Lack of drug supply for the community health practitioner (CHP)
- * Many patients go to the hospital in M-city without primary health care in H-Myun health sub-center or health dispensary

c. Weak points found currently

1) Health education ... Urgently and primarily needed with islanders more concern and interest.

2) Food supply and nutrition ... Food supply is plenty, however, certain nutrients intake deficiency and salt intake will be checked through the base-line survey

3) Safe water and basic sanitation ... Most families drink rain water without any filtration or chlorination. Even the piped water supplied to the small portion of the islanders is not chlorinated. Most privy is primitive and unsanitary. Therefore safe water supply and sanitary sewage disposal should be the most urgent part to be improved.

4) Maternal and child health and family planning ... Once the family planning by the strong governmental policy was actively carried out everywhere in Korea; however, today the family planning including maternal and child health is not well developing. Because, regarding family planning, the population of the island areas is decreasing, especially among young adults and young marrieds.

5) Immunizations ... The government provides immunizations free of charge or at low cost through health sub-center. Only the record keeping could be improved.

6) Communicable disease control ... Tuberculosis is still existing as one of health problems in the rural area (prevalence rate: 2%). Japanese B encephalitis is no longer the threat by mass immunization to the susceptible group.

7) Appropriate treatment of common diseases and injuries ... Primary health care for diseases and injuries treatment is not satisfactory.

8) Essential drug ... Health dispensary has not enough drugs, therefore many villagers go to the local drug store.

d. Most common diseases

The baseline study will yield accurate statistics, but local doctors and health officials mentioned hypertension, liver and stomach cancer, tuberculosis, pesticide poisoning as the usual diseases.

e. Transportation and access to hospitals or clinics

This is a very important problem to be solved urgently. Especially for the smaller islands the problem is so critical. Regular boat service to and from M-city (for secondary health care) is only three times/day from H-Myun. Boats from M-city reach smaller islands only every other day. Emergency care don't match the boat schedules.

f. Medical insurance

Even if a critically ill person can get to M-city from H-Myun that person most often does not have medical insurance. The government has promised to institute a medical insurance program for those in farming and fishing villages by 1988.

5. Proposal (Strategy)

(1) Health care improvement

a. General objectives of the health work

1) To facilitate increased use of existing primary health care facilities.
2) After consultation with the government, to train and deploy medical personnel for existing public health sub-centers and to establish new sub-centers in locations if deemed necessary.

3) To detect and control chronic health hazards, and to educate the community in regard to their prevention.

4) To lower the incidence of communicable disease through health education, and sanitation especially sanitary toilet and kitchen construction.

5) To work with existing health councils and future credit union leaders (see development part of this project) to enable the full participation of citizens in the future government health insurance program.

6) To raise the health standards of the Myun(township) with particular attention to the sanitary conditions of toilets and kitchens.

7) To work with the leaders of the development projects and/or credit union leaders to finance projects to improve the water supply.

(2) The improvement of the sanitation of the environment

a. Cooperative raising of pigs

1) Purpose of the project:

The living conditions of the island people are unchanged from a primitive condition. One especially sees this from the way they raise pigs. The pigsty is connected to the privy, with the result that human feces becomes the pigs food. Also the pigsty is too close to the peoples' kitchens, which of all the rooms in a house should be the most hygienic. Thus to improve the sanitation of the islands, one must first begin with the way pigs are housed. In this way the elements causing disease will be diminished. For example, mosquitos and flies, which act as intermediaries to transmit communicable disease, will not be able to breed as easily.

2) Appropriateness of the project:

a) A cooperative pigsty will enable a few families to raise their pigs in a common location at a distance from their toilets and kitchens.

b) Cooperative raising of pigs will stimulate a mindset of working together

c) Taking turns looking after the pigs will save human power.

d) The environment has the possibility of becoming cleaner by the use of mosquito netting and sterile, hygenic handling.

b. Toilet improvement

1) Background of the project:

Toilets on the islands are not for the sake of waste disposal, but rather for producing fertilizer. Therefore, for the sake of decomposing the fecal material to eliminate parasites, it must be taken care of differently. As it is, the human wastes are cut off from light and all kinds of disease-bearing germs inhabit them.

2) Purpose of the project :

Improve the island toilets by constructing "3-stage toilets" (developed by Koyang Rural Health Center) so that the human wastes will completely decompose.

c. Kitchen improvement

1) Background of the project :

The island people have no cooking facilities worthy of the name. For example, a woman puts a chopping board on the dirt floor, bends over it and prepares the meal. She also may burn sticks to heat the food. This takes much time and energy which could otherwise be employed in agriculture. Furthermore, the repeated bending over hurts the back, possibly to the point of chronic backache.

2) Purpose of the project :

Remodel the kitchens so that persons may prepare meals standing up in front of a counter, so that they may have water piped in to the kitchen instead of having to go outside to fetch it. Thus the amount of time and energy spent in preparing meals will be less, and meal preparation will be more comfortable for them.

d. Roof-repair project

1) Motivation for the project :

Traditional Korean houses have had thatched roofs. The straw thatch spoils and becomes host to insects and bacteria. Also it must be changed annually that takes time and effort. The thatch that could become compost to enrich the soil is thus wasted on the roofs. These things can be avoided by re-roofing the houses with a "slate" roofs (an asbestos-like material).

e. Water resource development

1) Appropriateness of the project :

a) It is difficult to obtain an adequate supply of one of the most valuable resources of the island-potable water.

b) Rain water is used for drinking water

c) Water is often considered to valuable for bathing other than ordinary face and hand washing. For example, some persons on one island do not take a bath the entire winter. This leads to problems of hygiene.

d) From the viewpoint of lifestyle, the islands are lacking in cleanliness.

e) Acid rain falls, and people who should not even let it hit their bodies drink this water.

f) Even the reservoir waters which are the other source of potable water are becoming polluted.

f. Method of water resource development :

1) underground water resource development 1 site

2) development of new water reservoirs in the foothills 3 sites

g. Subjects of the project :

Cooperative Development Citizens' Committee

(3) Development projects

a. General remarks

- 1) Reason for the income-generation projects :
"General Objectives by Categories within the Project"

b. Way of overcoming poverty

- 1) Find an income-generating project that requires little production costs
- 2) Change from catching fish to fish cultivation (marine cultivation)
- 3) Raise up a people able to work cooperatively together by getting them engaged in cooperatively together by getting them engaged in cooperative projects
- 4) Produce those agricultural and marine products that are easy to market
- 5) Induce light industry to the island areas

(4) Credit union project

a. Reason for the establishment of the credit union

One of the necessary conditions for human beings to live like human beings is that they have a measure of economic independence. A credit union, by which poor people of the islands gather small change together and create a fund which they themselves can administer, is a most democratic form of financial management. Through the experience of carrying out this kind of project, people learn wisdom concerning how to live and work cooperatively, and this is a stimulus to further training in democracy.

On the island of S-D island in H-Myun, for example, the people started with a capital base of ₩5,000,000. This amount in turn enabled them to get a further grant of ₩5,000,000, so that they have a capital base of ₩10,000,000 to work with. Other islanders are seeing this S-D Island Rice Bank (run similar to a credit union), and they are preparing for their own credit unions.

b. Purpose

- 1) To solve the widespread practice in the island areas of borrowing money at high interest rates (5 - 10% per month).
- 2) To correct the self-image of the island people that leads to their vain habit of trusting to luck for their catch of fish and leading unstructured, wasteful lives.
- 3) To create a fund that enables citizens to engage in cooperative projects.
- 4) To create increased income that can be reinvested in the credit union.
- 5) To overcome dependence on the economy of the cities and to build a village-based economy.
- 6) To cultivate the ability of the village people to manage their own affairs in a rational manner.

c. Plan for promotion of the credit union project

- 1) To hire a specialist who can activate and manage the credit union movement in the three Myuns.
- 2) To utilize the Village Health Workers (VHWs) as assistants to the treasurer (assist in enrolling people and collecting contributions).

- 3) To provide education about credit unions.
- 4) To install a person as treasurer who will do the clerical work necessary for the credit unions.
- 5) To establish a center for the credit unions at which the dividends of the members of the credit unions can be automatically reinvested.
- 6) To induce people to put aside 10% of the profit earned by the various projects.
- 7) During the peak agricultural seasons to be able to borrow from the agricultural fund in the credit unions. When local funds run short, to establish lines of credit with city credit unions.



Fig. 1. Study areas

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