

Shifting Cultivation and Governmental Policy in Korea

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1. Introduction

(1) Definition

'Shifting cultivation' is a loose term designating various kinds of 'proto-agriculture.'¹⁾ In Korea, it has a proper term, 'Hwajonnong' (화전농) whose literal meaning is 'fire-field agriculture.' A 'fire-field (Hwajon : 화전)' is defined by the Law of Fire-field Regulation (1966), as the land whose forest was cleared illegally by setting fire or by other means, and is or had been used for agricultural purpose.²⁾ In this paper 'shifting cultivation' is used for Hwajonnong (fire-field agriculture) and 'swidden field,' for Hwajon (fire-field).³⁾

(2) Importance of Study

1) Ecological Importance

Korea is a mountainous country. Currently two thirds of South Korea is forest (of which 8% is denuded).⁴⁾ (The percentage of forest should be higher in North Korea because of its more mountainous relief.) The effect of recurrent burning of the forest by shifting cultivators should have been enormous. The fire affects vegetation, soil, water, etc. in various ways.⁵⁾ The study of shifting cultivation should be located at the center of ecological history which is generally neglected by geographers, historians, anthropologists, foresters, and agronomists alike in Korea.

2) Socio-economic Importance

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- 1) Spencer, J.E., 1966, *Shifting Cultivation in Southeastern Asia*, University of California Press Berkeley; pp. 6~10.
- 2) Gangwondo (Gangwon Province), 1966, *Hwajon Jeongrisa* (History of Swidden Control), Chuncheon, Korea; Dongyang Munhwa Press, p. 437.
- 3) The term "swidden" was used with the connotation of 'burned clearing.' Conklin, H., 1957, *Hanunoo Agriculture*, pp. 1~2.
- 4) Ministry of Agriculture and Fisheries, 1981, *Year Book Agriculture and Forestry Statistics*, pp. 24~25 (For land use for other purposes, see Appendix figure 1).
- 5) The effects are explained by many scholars. For example Goudie, A., 1981, *The Human Impact*, Cambridge, Mass.; MIT Press.
Marsh, G.P., 1965, *Man in Nature*, Cambridge, Mass.; Harvard University Press.
Sauer, C.O., 1956, "The agency of man on the earth," in W. Thomas, Jr., ed. *Man's Role in Changing the Face of the Earth*, Chicago; The University of Chicago Press, pp. 49~69.

Korean shifting cultivators in historic time had one obvious socio-economic characteristic, 'marginality.' They were the people of least wealth, lowest social status, outside of the dominant socio-economic organization. The interest of Korean historians has shifted from the royal family and aristocrats, to commoners, and recently to the lowest class. But studies of the lowest class was of servants, serfs, butchers, blacksmiths, acrobats, shamans, etc. but not of shifting cultivators. The neglect may be due to their isolation from the national socio-economic organization. If we realized their uniqueness and ecological impact, the study of shifting cultivators (and cultivation) would become much more meaningful.

2. Resurgence of Shifting Cultivation

(1) Shifting Cultivation as Prehistoric Incipient Agriculture

Most Korean historians agree that shifting cultivation had been the incipient agriculture of Koreans.⁶⁾ The first crops cultivated are believed to have been common millet, foxtail millet (*Setaria italica*), and barnyard millet (*Echinochloa crusgalli*).⁷⁾ Acorns and bone implements excavated with these grains from archaeological sites suggest that hunting and gathering should have been complemented by shifting cultivation. Horse, cow, and hen could

have been domesticated during this Neolithic Age.⁸⁾ Soybean, azuki bean (*Phaseolus angularis*), and dry-land rice (*Oriza sativa*) should have been introduced a little later to shifting cultivators (from China to Korea, then to Japan).⁹⁾

When bronze and iron tools were introduced to Korea (ca. B.C. 4th C.), Koreans formed sedentary communities probably because of the impact of new agricultural tools(esp. plows).¹⁰⁾ The introduction of wet rice(ca. 3rd C. B.C.) enhanced the process of sedentarization and class formation because of its high productivity and high labor input. Although there are few comments on shifting cultivation between 3rd C. B.C. and A.D. 15th C., there is no reason to deny the existence or importance of shifting cultivation during the period.¹¹⁾

(2) Resurgences in the Later Periods

Although shifting cultivation as a supplementary system should have continued, the increase in the number of shifting cultivators was a reversal of the general trend of sedentarization. Whenever agriculturalists were exploited too harshly, many became vagabonds who might become shifting cultivators eventually.

Corruption and heavy exploitation were the general symptoms of the decline of each dynasty (Shilla Dynasty; 57 B.C.~A.D. 926, Koryo Dynasty; A.D. 918~1392, Chosen Dynasty;

6) Gang, Dongjin, 1982, *Hanguk Nongupui Yogsa*(A History of Korean Agriculture), Hankilsa; Seoul, p.19.

Jiji Pyonchan Wiwonhoe(Committee for the Publication of Regional Geography), 1980, *Hanguk Jiji*(Regional Geography of Korea), Seoul Daily News Co. Seoul, p.277.

7) Gang, D., *op cit.*, p.25.

8) *Ibid.*, p.18.

9) Jiji Pyeonchan Wiwonhoe, 1980, *op cit.*, p.277.

10) Gang, D., 1982, *op cit.*, p.22.

11) There are a few records of shifting cultivation and regulation of forest clearing with fire in A.D. 987, 1107, etc.

朝鮮總督府(Japanese Colonial Government of Korea), 1935, 朝鮮治山治水史考(A Study of the History of the Control of Mountains and Water), 朝鮮印刷所, Seoul, pp.23~27.

A.D. 1392~1910).¹²⁾ Among them, late Chosen Dynasty was the worst. The decline of Chosen Dynasty is regarded to have started by the Japanese invasion and consequent war within the Korean Peninsula (1592~1598). Although there were numerous invasions into Korea from the North and the South, Japanese invasion was most destructive in terms of economy and ecology because of its long duration, areal extensiveness, and indiscriminate burning and killing. The consequence was the drastic decrease of population and agricultural land.¹³⁾ When there was another series of invasions by Ching (=Manchurian Chinese) in 1627 and 1637, many people moved into 'Kilji (lucky land; 길지)' to avoid disasters permanently.

The major impetus to escape was, however, the harsh exploitation by landlords and the government. As taxable land was reduced drastically (the area of registered agricultural land never recovered to the prewar level until the Dynasty ended), farmers had to pay more tax and higher rent. Rent was higher than 50% of harvest, and the government collected miscellaneous ruthless taxes even from people for dead parents, run-away relatives and neighbors. With all these hardship, farmers could not endure the famine which continued for 40 years in late 17th century.¹⁴⁾ For all these reasons (war, high rent, over-taxation, corruption, and famine), many farmers had no choice but to become vagabonds and eventually shifting

cultivators in deep mountains where they could avoid vicious rent, tax, and war. Some places called 'Kilji' were especially popular as refuge, because those places were believed to be the 'lucky places' where people could avoid disasters according to a prophecy called '*Jeongkamrok*.'

3. Way of Shifting Cultivation

The life of Korean shifting cultivators had not been recorded in detail until 1920s when the Japanese colonial government studied shifting cultivators as part of a concern to protect forests for the use of timber.¹⁵⁾ Subsequent reports often depended much on the studies done in 1920s.

(1) Swidden Cycle

1) Site Selection

The following types of sites have been regarded as good for cultivation; ① where forest growth is rapid (virgin forest was especially valued), ② where broad-leaved trees are growing, ③ where shade-tolerant trees are growing, ④ gentle slopes, especially where deep and fertile alluvial soil exists.

The major conditions for erecting a new farm settlement in Korea have always been; ① suitable availability of drinkable water, ② an abundance of firewood, and ③ sufficient land to permit extended cycles of field cultivation

12) Imjeong Younguhoe(Club for Forestry Policy Studies), 1980, *Hwajon Jeongrisa*(History of Swidden Control), Dongyang Munhwa Printing Co. Seoul, p.6, pp.11~12.

13) Gang, D., 1982, *op cit.*, p.129.
Imjeong Younguhoe, 1980, *op cit.*, p.16.

14) Gang, D., 1982, *op cit.*, p.128.

15) The results were published by the Japanese colonial government in the books such as;
朝鮮總督府(Japanese Colonial Government of Korea), 1924, 朝鮮部落調査報告, 第一冊(Report of the Study of Villages, No. 1), 生士寫真製版所, Tokyo.
朝鮮總督府(Japanese Colonial Government of Korea), 1927, 朝鮮の人口現象(Population Trend of Korea), 調査資料 第二十二輯(Report No. 22), 朝鮮印刷所, Seoul.
朝鮮總督府(Japanese Colonial Government of Korea), 1933, 朝鮮の聚落(Settlement of Korea, V.1), 調査資料 第三十八輯(Report No. 38), 朝鮮印刷所, Seoul.

and abandonment. ⑤ south- or east-facing slope (for better absorption of sunlight). ⑥ where there are few pebbles or rocks. These conditions are variable according to local situations and crops to be cultivated.¹⁶⁾

2) Cutting and Burning

When a site is selected, the forest is first cleared with axes (or saws).¹⁷⁾ Large trees are girdled. This is generally done in fall. When completed, any wood useful as construction material or fuel are salvaged. The dead forest is set on fire in fall. When burning is incomplete, unburnt material is piled and set on fire in the following spring. Where there is only grass, it is set fire in spring. Fires are preferably set on days without wind.

3) Planting and Tending

After the first rain in spring, the swidden fields are prepared for planting by the cultivators. They often plow the fields after the first year. The soil is then dibbled by small hoes, and seeds tubers are sown. Foxtail millet, potato, and corn are planted earlier than beans or buckwheat. Night soil and compost may be added but not in the first year. Weeding may be required once or twice per year.¹⁸⁾

4) Harvesting, Rotation and Fallowing

Crops must be harvested before the first frost and are brought home to be placed in storage, although potatoes are usually stored in holes

dug in the field or adjacent roadsides. The rotation cycle varies according to local conditions. Potatoes or foxtail millet are generally planted first year, and potatoes, foxtail millet, soybean, corn, barley, buckwheat or azuki bean are planted subsequently. A cleared field is used for 4~5 years (sometimes up to 10 years), then fallowed for 1~10 years (sometimes up to 20 years). As reused fields are not as fertile as the original fields, the cultivation period decreases to 2~3 years in the second instance. When weed and fertility problems become too serious (yields drop off by half or more the second year), the field is 'abandoned (indefinitely fallowed).'¹⁹⁾ The fields near per-

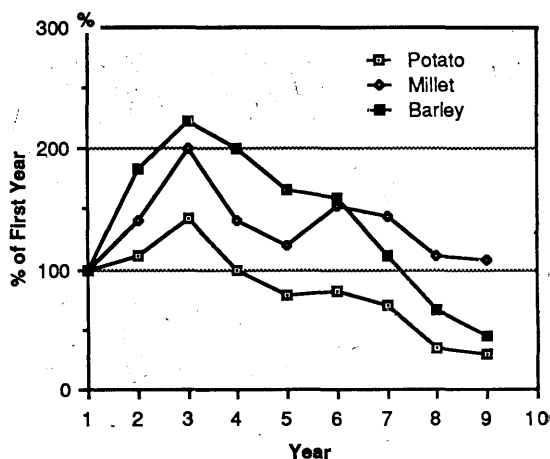


Fig. 1. Yield by Crop and Year

Source: Imjeong Younguhoe, 1980, *Hwajon Jeongrisa*,* p.36.

16) Imjeong Younguhoe, 1980, *op cit.*, pp.31-32.

17) 朝鮮總督府, 1924, *op. cit.*, pp.9~11.

18) Imjeong Younguhoe, 1980, *op cit.*, pp.33~38.

19) Gangwondo, 1966, *op cit.*, pp.33~38.

Imjeong Younguhoe, 1980, *op cit.*, pp.11~12.

* *Hwajon Jeongrisa* is the 'final report' published by Imjeong Younguhoe (Club for Forestry Policy Studies) which the Korean government supported financially. The report synthesizes most available information on swidden agriculture. The first half historically describes swidden agriculture on the basis of the studies published in the books such as *Hwajon Jeongrisa* (Gangwondo; 1966), *Report of the Study of Korean Villages* (Japanese Colonial Government of Korea; 1924), and *Settlement of Korea* (Japanese Colonial Government of Korea; 1933). Different studies were combined and units were modified to modern units so that contemporary readers can compare the results without difficulty. The latter half describes how the Swidden Control Program was established, and how South Korean swidden agriculturalists were 'processed' to be incorporated into the 'normal' sedentary agriculture.

manent settlements are often 'matured(=maintained; Sukjonhwa: 숙진화)' with continuous addition of composts and night-soil, become 'permanent' fields.

<Fig. 1> shows the yield by crop and year according to the report published in 1980 which compiled all the studies done by the Japanese in 1920s, the studies by Gangwondo in 1960s, and the changes in 1970s.²⁰⁾ The data on <Fig. 1> is from a case study at only one place, and cannot be generalized. There are other cases where production decreases continuously from the first year. The reason why one may get higher yield in the second year is not clear (perhaps the decay of residue materials enables plowing and denser planting). Monoculture within each field is another characteristic of Korean shifting cultivation, which contrasts with tropical shifting cultivation and Korean permanent field cultivation (Koreans usually practice mixed cropping on fields other than rice fields).²¹⁾

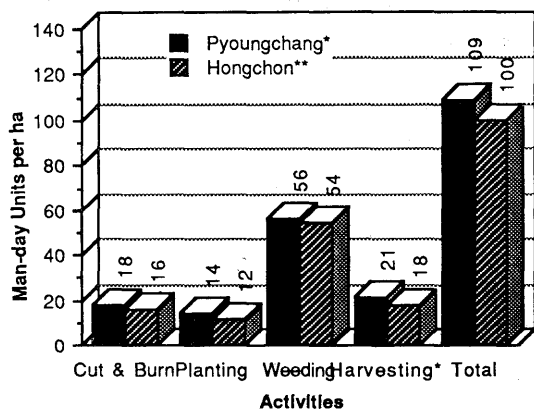


Fig. 3-A. Labor Allocation(Newly Cleared Field)

* Harvesting includes the planting of seeds for the next year.

** These two areas are adjacent areas.

Source: Gangwondo, 1966, *Hwajon Jeongrisa*, p. 17.

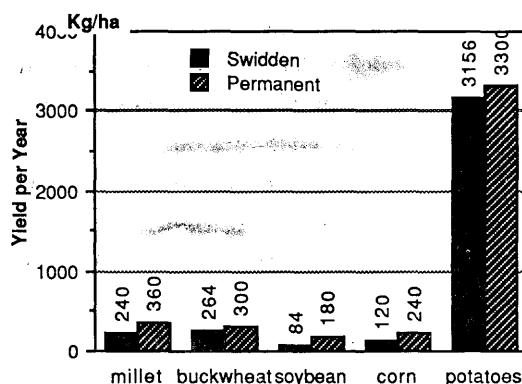


Fig. 2. Comparison of Yields(Average Fertility)

Source: Imjeong Younguhoe, 1980, *Hwajon Jeongrisa*, p. 37.

(2) Economics of Shifting Cultivation

<Fig. 2> shows the comparison of yield in swidden fields and 'permanent' fields. Good swidden fields produce more crop than average 'permanent' fields. Shifting cultivators seldom grow rice, the dominant cash crop, because of the problems of irrigation and short growing

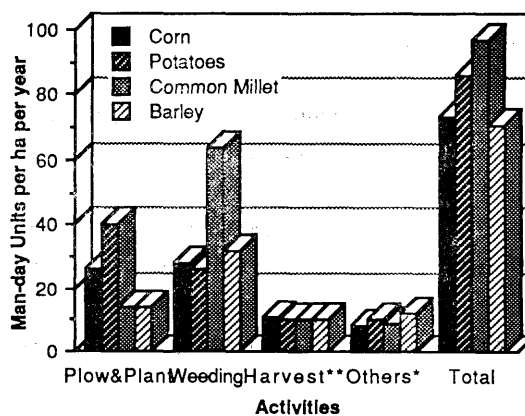


Fig. 3-B. Labor Allocation(Several-year-old Field)

* Mainly transportation.

** Harvesting includes the processing of crops for storage.

Source: Gangwondo, 1966, *Hwajon Jeongrisa*, p. 17.

20) Imjeong Younguhoe, 1980, *op cit.*, p. 35.

21) Gangwondo, 1966, *op cit.*, p. 17.

Spencer, 1966, *op cit.*

season. But considering the low position of the cultivators to begin with and the rent of over 50% of the total production in lowland areas, they are often better off than landless tenant farmers of lowland areas.²²⁾

〈Fig. 3-A and 3-B〉 show the labor input for various activities in shifting cultivation. The amount of labor-time devoted for weeding is significant in contrast to the case of a tropical shifting cultivation.²³⁾

4. Ecological Impact

(1) On Vegetation

It is well known that burning of forest results in the change of vegetation. Unfortunately the impact of shifting cultivation on the vegetation in Korea is little studied. It is suggested that pyrophytes may dominate the land.²⁴⁾ The dominance of pines in Korea might have resulted from the recurrent burning. But it might also have resulted from the protection of pine forests and planting of pines by the government. Another impact may be the creation of grasslands. Grass covered landscape was implied in the term 'Red Mountains' which symbolized denuded Korean mountains during the first half of 20th century. But the denuded mountains have been rapidly reforested during the last 20 years, clearly by the result of human protection and planting. The lack of intensive grazing may be one explanation of this success.

(2) On Soil

The burning of forest and consequent defore-

station results in the change of soil characteristics. The results are nutrient depletion, soil compaction, soil erosion and many other negative changes. The most feared aspect (by Korean governments) was soil erosion which directly affect low-land agriculture and lives through flooding. Still, there are so few case studies on this subject that further discussion is impossible beyond quoting the studies in other countries. The regulation of shifting cultivation was justified partly by blaming it for soil erosion, studies of which were quoted from foreign sources.²⁵⁾

(3) On Water

One way to justify the regulation of shifting cultivation was to blame it for causing flooding and drought. A government sponsored research report states that the frequency of flooding (Table 1) has increased due to deforestation without any explanation of the data used. It may be true, for the case studies in the U.S.A. support it.²⁶⁾ It may be more valid to say that forests have the value of "regulating, of econo-

Table 1. Frequency of Flooding

Period	Frequency of flooding
Shilla Dynasty (57B.C.~A.D. 926)	Once per 35 years
Koryo Dynasty (A.D. 918~1392)	Once per 9 years
Chosen Dynasty (A.D. 1392~1910)	Once per 5 years
Since 1911	Every year

Source: Imjeong Younguhoe 1980, *Hwajon Jeong-risa*, p. 57.

22) According to an interview with a shifting cultivator, he was better off than he had been in the lowland area where he had owned land and sometimes collected rent. He even "boasted" that he could produce three year's food (potato) in one year and could save some money. He wanted to return to lowland after making money through shifting cultivation. Imjeong Yonuguhoe, 1980, *op cit.*, p. 25.

23) Conklin, H., 1957, *op cit.*, p. 150.

24) Sauer, C., *op cit.*, p. 55.

25) For example see: Gangwondo, *op cit.*, pp. 36~38.

26) Goudie, A., *op cit.*, pp. 155~159.

mizing the drainage of the rain water."²⁷⁾ But the fact is that the relation of deforestation (esp. shifting cultivation) on flooding has never been studied enough to point to shifting cultivation as the major cause of flooding in Korea.

5. Governmental Policy on Shifting Cultivation

Shifting cultivators had not been welcomed by the government throughout Korean history for various reasons. Environmental degradation, difficulty in tax collection and in mobilization, and social instability were the major reasons for their suppression, usually their regulation and taxation. But regulation was difficult because the government could not correct the fundamental problems (such as land-tenure, rent, taxation) which drove the people to mountains.

(1) Before Japanese Occupation (~1910)

The first regulation of forest-burning appeared in A.D. 987. The king ordered the burning of forests banned during 'the season of growth', namely between February and October in the lunar calendar (March and November in contemporary solar calendar).²⁸⁾ It was to prevent unnecessary killing by ruthless firing for hunting or cultivation. This regulation was pro-

bably motivated by the Buddhist creed of nonkilling (the Koryo Dynasty adopted Buddhism as national religion).

The regulation in Chosen Dynasty(1392~1910) was more mundane and practical. Deterioration of 'land force (Jiki: 지기)' (Pungsu term; actually meaning forest cover and fertility) was the initial reason.²⁹⁾ Protection of pine forests was also enforced to preserve ship-building material. The protection of pine forests became more strict and important in later period of the Dynasty. The regulation of forest-burning became so strict that a local official even asked permission for burning of forest to collect wild vegetables which did not grow under high forest(the petition was accepted).³⁰⁾ Cultivation of stream-side lands was prohibited to prevent flooding.³¹⁾

The taxation of swidden fields had become important by the 15th century.³²⁾ Cultivation of the lands below 'mountain-waist (Sanyo: 산요)' was admitted officially for the first time in 1658.³³⁾ The principle was continued by the Japanese colonial government and the South Korean government. Swidden fields were assessed lowest in fertility (thus lowest tax) and were not taxed when fallowed. But corrupt local government officials often collected tax on fallow fields.³⁴⁾ There were also cases where land owners come after the clearing and collected rent, or sold the cleared land.³⁵⁾ As

27) Marsh, G., *op cit.*, p.175.

28) The historical records used in this section are drawn mainly from the book, 朝鮮治山治水史考 which contains as an appendix a good collection of unaltered(no translation) quotations(related with forest or water) from major Korean historical documents written in Classic Chinese. 朝鮮總督府, 1935, 朝鮮治山治水史考.

The records of regulation appeared in 987 A.D., 1109, 1296, 1352, etc. *Ibid.*, p. 23, p. 25, pp. 27~28.

29) *Ibid.*, p. 30(1434 A.D.), p. 29(1419) (from Royal Documents of King Sejong).

30) *Ibid.*, p. 31(A.D. 1437).

31) *Ibid.*, p. 35(A.D. 1452), p. 36(A.D. 1457).

32) *Ibid.*, p. 36(A.D. 1469).

33) *Ibid.*, p. 49(A.D. 1658).

34) The King banned the collection of tax from fallow fields. *Ibid.*, p. 61(A.D. 1726).

35) This kind of action was banned in 1671. *Ibid.*, p. 54.

farmers continued to clear above 'mountain-waist,' the government tried to tax those fields without admitting the right of cultivation legally.³⁶⁾

The governmental policy on shifting cultivation during this period can be summarized as follow; ① Prohibit the cultivation above 'mountain-waist.' ② Admit, protect, and tax the cultivation below 'mountain-waist.' ③ Prohibit any private burning or felling of pine forests.

(2) During Japanese Occupation (1910~1945)

The Japanese regarded Korean forests as resources to be used for military and civilian purposes, and to be exported to gain money for military build-up and industrialization of Japan. Japan initially acquired the right of lumbering in northern Korea where economic forests were most abundant³⁷⁾ after Japan had won over Russia in Russo-Japanese War (1904~1905).³⁸⁾ When Japan colonized Korea completely in 1910, Japan accelerated the lumbering with the set-up of 'Forest Agency (Younglimchang: 영림창),' which was actually a lumbering agency.³⁹⁾

The Japanese colonial government regarded

shifting cultivators, who flourished especially in the Northern part of Korea, as competitors who consumed forests irrationally. What the Japanese wanted was the timber.⁴⁰⁾ They studied the shifting cultivators to establish an effective policy which can keep forest resources from them. Primary principle adopted was prohibition of cultivation of land with a slope higher than 30 degrees. But even with the detailed study of shifting cultivators,⁴¹⁾ the regulation policy did not succeed. The number of shifting cultivators increased (or at least did not decrease) until the end of Japanese occupation (See Fig. 4). This was natural because exploitation of farmers was even more severe (maximum rent up to 80% of harvest) than that of Chosen Dynasty.⁴²⁾

(3) Since Liberation(1945~)

Korea was liberated from Japan by the Allied Force in 1945. As Korea was divided into South and North Korea, and information on North Korea is hard to get, it is difficult to discuss North Korean policy on shifting cultivation.

As the North Korean government stopped exporting electricity, coal, and fuel-wood to South Korea, South Koreans were forced to

36) *Ibid.*, p.95(A.D. 1820). But the shifting cultivators regarded the taxation as admitting the right of cultivation.

37) Hanguk Imjeong Younguhoe(Korean Culb for Forestry Policy Studies), 1975, *Chisan Nokhwa Samshipnyonsa*(30 Years History of Mountain Control and Afforestation), Dongshin Printing Co. Seoul, pp. 39~40.

Major trees of the Northern Korea were *Pinus koraiensis* Sieb. et Zucc, *Picea jezoensis* Carr., *Abies nephrolepis* Max., etc.

Ji, Yong-Ha, 1964, *Hanguk Imjeongsa*(A History of Korean Forestry Policy), Myoungsusa; Seoul, pp. 117~122.

38) Russia owned the right at the time.

39) Ji, Y., 1964, *op cit.*, pp.139~140.

40) The colonial government documents express the concern for forest resources and implicitly condemn shifting cultivation as stealing.

朝鮮總督府, 1924, *op cit.*, p. 28.

41) The study was done in detail(mainly description and statistics) by government sponsored Japanese scholars.

朝鮮總督府, 1926, 火田の現状; 朝鮮總督府, 1928, 火田調査報告; 朝鮮總督府, 1933, 朝鮮の聚落.

42) Imjeong Younguhoe, *op cit.*, p. 22.

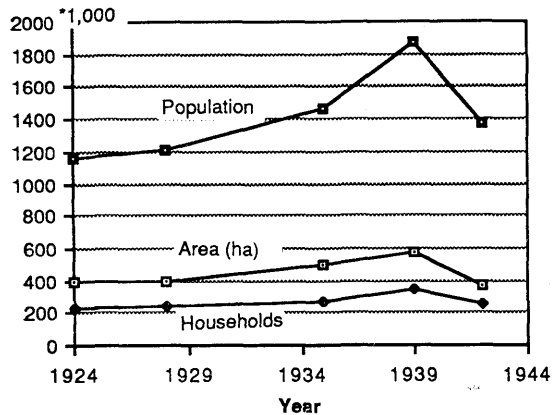


Fig. 4. Statistical Trends of Swidden Agriculture

* The area was about 2% of the total area of Korea.

** The population was about 5~10% of total population of Korea.

Source: Imjeong Younguhoe, 1980, *Hwajon Jeong-risa*, p. 29.

accelerate the depletion of their forest resources. The Korean War (1950~1953) played further havoc with the forests. Another factor was the massive increase in population resulting from the migration of North Korean residents to South Korea (more than a million during the War). These people concentrated in large cities, and the demand of wood for fuel and construction increased substantially.

The South Korean government could not pay much attention to shifting cultivation because there were too many other problems to deal with. The government began to consider shifting cultivators seriously for security reason when North Korean commandos (approximately 600) were sent to South Korea in 1968. The government moved 'solitary houses' and remote hamlets to low-land settlements to prevent them from becoming hostages and to deprive food and shelter from the commandos to come.⁴³⁾

43) Imjeong Younguhoe, *op cit.*, p. 115, p. 185.

44) *Ibid.*, pp. 188~189.

45) *Hwajon Jeong-risa* (1980) is the final report of the program.

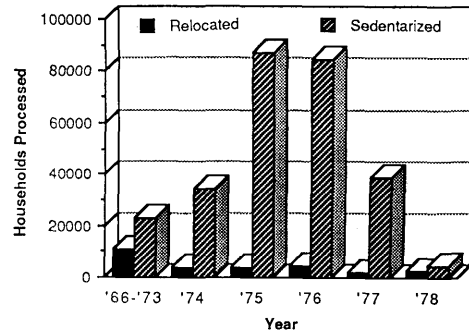


Fig. 5. Households Processed by Swidden Program

* 'Relocation (이주)' means permanently moving the swidden agriculturalists out of the municipal villages which they live in.

** 'Sedentarization (정착)' means moving the swidden agriculturalists within the municipal villages which they live in.

Source: Imjeong Younguhoe, 1980, *op cit.* p. 301.

The turning point in the policy may have come from President Park who observed swidden fields during his visit to a highway construction site in 1973.⁴⁴⁾ The 'swidden control program' was accelerated, and 'completed' by 1979 (See Fig. 5). The basic rule became the '20 degrees principle.' Swidden fields over 20 degrees of slope were to be abandoned and reforested, and those below 20 degrees were to be 'stabilized (became permanent fields).' Terraces and windbreaks were used to prevent further soil erosion.

Those people who lost most of their lands because of the program were given compensatory lands in the lowlands, and were assisted with money for the construction of new houses. The government declared the successful completion of the swidden control program in 1979.⁴⁵⁾ Although there might be some swidden fields left, it seems reasonable to say that shifting cultivation is not any more a significant

form of agriculture in South Korea.⁴⁶⁾

6. Characteristics of Korean Shifting Cultivation

Korean swidden agriculture can be characterized as follow:

(1) Monoculture. Only one crop was grown on each swidden field in contrast to the polyculture of lowland dry-fields and the swiddens of other countries.

(2) 'Virgin (primary)' forests were preferred to secondary forests.

(3) Major crops were potatoes, foxtail millet, barley, and azuki bean.

(4) Swidden fields were often 'matured' and became permanent fields. These fields had high property value and the title of them could be sold and bought.

(5) Share-cropping was often done between new comers and established swidden farmers.

(6) Swidden agriculturalists of Korea seldom migrated to have new fields. Instead, they opened new fields near their houses whenever they wanted new fields.

(7) Swidden fields were most abundant in mountainous areas, especially in the North-eastern part of the Korean Peninsular.

(8) Swidden agriculturalists generally lived in dispersed houses, in contrast to the concentrated houses of low-land areas.

(9) Swidden agriculturalists seldom had long intergenerational transfer of knowledge. They usually regarded swidden agriculture as temporary refuge from unfavorable social and economic conditions. Most of them wanted to

return to the 'normal' lowland life, especially for the education of the younger generation. Independent identity as 'swidden people' or 'swidden culture' was not strong.

(10) Swidden agriculture was reported to be completely abolished by 1979 in South Korea. The Swidden Control Program was enforced with the strong government power for military and ecological reasons. Resettlement by 'relocation' and 'sedentarization' effectively drove the swidden people out of their highland residences to lowland villages.

(11) Industrialization and urbanization played a great role in absorbing the people emigrating from rural areas. Urban squatters in the new urban-industrial society of Korea are the modern equivalence of the swidden agriculturalists of the past agricultural society.

7. Legacy

(1) Ecological Legacy

It is obvious that swidden agriculture had been one of the major factors in the ecological history of Korea. It should be done before the last generation of shifting cultivators disappear.

(2) Socio-economic Legacy

Swidden agriculturalists were 'marginalized' people, both geographically and socio-economically. They would not disappear unless the fundamental socio-economic problem of marginality was solved. They did not simply disappear but resurfaced with the form of squatter settlers in large cities. They were absorbed into 'regular' agricultural sector because of the

46) It is supported by the observation of the 'Hwajon (fire-field)' village by anthropologists.

Munhwa Gongbobu (Ministry Culture and Mass-communication), 1977, *Hanguk Minsok Jonghab Josa Bogoseo* (Comprehensive Research Report of the Ethnography of Korea), No. 7 (Gangwon Province), Seoul Newspaper C. Seoul; p. 52, pp. 277~288.

Also, my colleagues in Seoul who have been to the village in 1979 reported the extreme rarity of shifting cultivation.

massive rural out-migration responding to the high demand of labor in industrial cities. The demand was created by the fundamental change of Korea's economic structure in 1970s from agricultural economy to industrial economy. The contemporary urban squatter settlers should also be approached with the understanding of fundamental causes rather than mere appearance if any policy should have a significant positive result.

(3) Further Researches Needed

Many interesting research themes revealed themselves in the course of this story of shif-

ting cultivation. Among them: the impact of burning and deforestation on vegetation, soil, water and climate; socio-economic origin of shifting cultivators; shifting cultivation as a supplementary system; the economy of shifting cultivation; governmental policies regarding it; shifting cultivators' perception of the environment; the usufruct concept among shifting cultivators; the impact of the introduction of potatoes and corn on Korean shifting cultivation; 'maturation' process of swidden fields. These are only a few of the fascinating themes related with shifting cultivation in Korea waiting to be studied seriously.

한국의 火田農業과 정부의 정책

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1. 한국 火田農業의 특징은 다음과 같다.

(1) 다른 나라에서와는 달리 한 筆地에 한가지 작물만을 재배하였다.

(2) 處女林이 개간지로 선호되었다.

(3) 주요 작물은 감자, 기장, 보리, 쌀이었다.

(4) 火田은 종종 熟田化되었고 이러한 밭은 높은 재산가치를 가져 매매되었다.

(5) 기존 火田民과 신참 火田民 사이에는 小作도 종종 이루어졌다.

(6) 한국의 火田民들은 새로운 耕作地를 얻기 위하여 移住하기 보다는 정착된 집 부근의 산을 개간하였다.

(7) 火田은 산악지대, 특히 한반도의 동북부에 가장 많았다.

(8) 火田民들은 평야지대의 사람들과는 달리 散村을 이루고 살았다.

(9) 火田民들이 여러 세대에 걸쳐 火田農業知識을 전수하며 사는 경우는 드물었다. 그들은 보통 火田農業을 어려운 사회·경제적 상황에서부터의 일시적 도피로 생각하였다. 대부분의 火田民들은 자녀들의 교육을 위하여 '정상적인' 平野地帶에서의 생활로 복귀하기를 원하였다.

(10) 한국의 火田農業은 1979년에 이르러 완전히 사라진 것으로 보고되었다. (남한에서) 정부에 의해서 제정된 火田整理法은 안보와 생태적 이유에서 강력하게 집행되었다. 정부의 火田民 疎開 作業은 火田民들을 평야지대로 이주시켰다.

(11) 산업화와 도시화는 농촌지대에서 移住하는 農民들을 수용하는데 큰 역할을 하였다. 현대 도시산업화 사회에 있어서의 무허가 판자촌 주민들은 과거 농업 사회에 있어서의 火田民들

과 대등한 사회·경제적 위치를 차지하고 있다고 볼 수 있다.

2. 火田農業에 대한 정부의 정책

한국 정부의 화전 농업에 대한 정책은 크게 세 시기로 나누어 생각할 수 있다.

(1) 한일합방 이전

전체적으로는 火田農業을 억제하는 편이었지만, 산허리(山腰) 이상의 火田은 금지하고, 산허리(山腰) 이하의 火田은 양식화하여 세금을 받아내고, 소나무(松林)는 특별히 벌목을 금지하였다.

(2) 일제 통치기간(1910년~1945년)

일제 통치기간 동안 일제는 영림창을 설치하여 山林을 벌채했다. 이 기간동안은 농민들의 경제적 형편이 악화되어 火田農의 수는 증가하였지만 日帝는 이를 약탈 농업으로 규정하고 단속하였다. 원칙적으로 경사 30° 이상의 경지는 경작을 금지하였지만 실효를 거두지 못하였다.

(3) 해방 이후

해방 직후에는 火田農에 대한 정부의 관심이 많지 않았으며 1970년대 들어서 생태적·안보적 이유로 화전농업의 정리가 강력하게 수행되었다. 火田정리법에 따라 경사 20° 이하의 경지는 숙전화(熟田化)되고 경사 20° 이상은 폐기되어 山林으로 환원되었다. 火田民들은 가까운 동네 또는 새로운 곳에 移住 정착되었다. 정부기관의 발표에 의하면 1979년에 이르러 火田의 정리가 완료되었다.

3. 교 혼

(1) 생태학적 교혼

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火田農業은 한국의 生態史에 있어서 매우 중요한 위치를 차지한다. 火田農業에 대한 연구는 마지막 火田農 세대가 사라지기 전에 수행되어야 할 것이다.

(2) 사회·경제적 교훈

화전농은 지리적으로나 사회경제적으로나 주변화한 집단으로 생각할 수 있다. 그들은 사회·경제적 주변성이 근본적으로 해소되지 않는 한 사라지지 않는다. 그들은 오늘날 대도시에서 극도로 가난한 판자촌 주민의 형태로 다시 나타났다. 그들중의 일부는 산업화된 대도시로의 인구 이동에 따른 농촌 노동력의 감소를 채우며 非火田農業 부문으로 흡수되었다. 오늘날 한국 대도시의 무허가 판자촌에 대한 정책도 미관상의 이

유가 아닌 근본적인 사회·경제적인 이유에 대한 이해와 이를 해소하기 위한 노력이 병행되어야만 성공할 수 있을 것이다.

(3) 앞으로의 연구 과제

본 연구를 진행하는 동안 많은 연구 주제들이 부각되었다. 그 예를 들면 다음과 같다.

火田農業이 토양, 하천, 기후, 植生에 미친 영향, 火田民들의 사회·경제적 발생과정, 식량보충수단으로서의 火田農業 火田農의 경제, 정부의 정책, 火田民의 환경인식, 火田民 사회에서의 使用權의 개념(usufruct), 감자와 옥수수 도입이 火田農業에 미친 영향, 火田의 熟田化과정, 이 밖에 북한에 있어서의 火田農業에 대한 연구도 필요하다고 본다.