

# *An Example of Cooperative Sustained Yield Unit*

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In conjunction with my Forest Fire Fighting Study Tour in the United States, I had the occasion, after its termination on October 12, 1951, to observe briefly and gather notes on a certain type of management under a working plan of a forest area in the Olympic Peninsula, State of Washington. The forest under management is known as the Shelton Cooperative Sustained Yield Unit, cooperative in the sense that a part of the forest comprised therein is owned by the Simpson Logging Company while another part is owned by the nation. Here is a demonstration of how government and private industry can work together under a common plan of management to achieve their own interests.

The establishment of the cooperative sustained yield unit is authorized under Public Law 273, passed by the 78th Congress of the United States and approved on March 29, 1944. The purpose of this law is "To promote sustained-yield forest management in order thereby (a) to stabilize communities, forest industries, employment, and taxable forest wealth; (b) to assure a continuous and ample supply of forest products; and (c) to secure the benefits of forests in regulation of water supply and stream flow, prevention of soil erosion, amelioration of climate, and preservation of wild-life."

Records in the office of the Forest Supervisor at Olympia, Washington, show that the Simpson Logging Co. submitted its application in March, 1944, for benefits, rights and obligations under Public Law 273. It appears that the Unit has a total area of

270,266 acres, 111,466 acres (41.2%) being National Forest and 158,760 acres (58.8%) being Simpson Lands. The kinds of forest growth then obtaining in these lands are shown in a table.

It is estimated that the U.S. lands had an available mature timber stand of about  $4\frac{1}{3}$  billion board feet while that of the Simpson lands had one billion board feet.

On September 18, 1946, a public hearing was held at Shelton, Washington, in order to give a chance to any person interested in voicing his objection or approval to the proposed establishment of the Unit. Copies of the proposed Agreement between the Simpson Logging Company and the U.S. Government were made available to the public. In broad terms, the Agreement provides for the sale of the available National Forest timber within the Unit to the Simpson Logging Company at its appraised value without competition; it establishes a method of determining the rate at which cutting will be done; it sets the general specifications for the management of the cooperating properties; it protects the public interest in the use of the National Forest for recreation or other public purposes; it provides for the manufacture of not less than 80 per cent of the timber yield of the Unit in Shelton and McCleary; and when executed and recorded will constitute an encumbrance upon the Company lands involved for a period of 100 years. The Agreement envisages an annual cut of 100 million board feet from the effectivity of the Agreement up to the end of 1956, after which the estimated allowable sustained

yield cut will be about 90 million board feet annually.

The following commonly recognized methods of cutting, or variations and combinations thereof are employed; (1) partial cuttings, and (2) clear cutting by blocks or staggered settings. These methods of cutting are designed to fit the physical conditions of the forest, to effect suitable silvicultural treatment of the stands, to accomplish the most practical possible utilization of the forest resource, to assure the early and complete re-establishment of a stand of desirable forest trees on areas cut over, and to bring about conditions favorable to their optimum growth. The location and distribution of these staggered settings are shown in a road and setting maps of (1) Grisdale Area (Wynochee River Drainage), (2) Canyon River Area, and (3) Vance and Rock Creeks Area. No setting exceeds 60 acres in area and endeavor has been made to limit each setting to not more than 40 acres, depending of course upon the physical condition of the area. It was gathered that the U.S. Forest Service requires partial cutting along big rivers and in such areas which are not set aside for recreational purposes.

The Agreement also provides that prior to the beginning of the cutting, a cutting plan shall be prepared by the U.S. Forest Service (Regional Forester) and the Company which will cover the operations planned for the ensuing three-year period or for such other period as may be mutually agreed upon. This plan is termed the "Unit Management Plan."

After four full years of operation, the Simpson Logging Company prepared a report which attempts to show what is being done to carry out the intent of the agreement, the basic concept of which is to jointly manage the cooperating lands so that the maximum productivity can be sustained from these lands as a unit, to stabilize the communities dependent upon the timber thereon for their life.

The report brought out the fact that the volume of old growth timber, especially that of private ownership, is decreasing each year and it is becoming apparent that time is an important factor in setting up a practical forest management plan that would provide a sufficient supply of raw materials necessary to keep the plants running at capacity required to maintain the payrolls for these plants. Similarly, the public timber in the watersheds back of the privately-owned lands, if handled as a unit on a sustained yield basis, would permit a cut far short of the requirements of these plants. The obvious answer was the pooling of all the land and timber of the Simpson Logging Company, both mature and immature, with certain lands and timber of the United States, which will be jointly managed by both parties. After much study and gathering of data, the Shelton Cooperative Sustained Yield Unit was established.

#### *Applicability in the Philippines*

1. The scheme of pooling together private and government owned forest lands is not applicable in the Philippines as there are no extensive privately-owned forest lands in this country.

2. Although the Bureau of Forestry has control and jurisdiction over public lands, still there would seem to be no conflict with the basic Forest Law if certain parcels of forest lands be set aside, either by special legislation or executive proclamation, to promote sustained yield forest management in order to attain definite objectives, such as the stabilization of communities, forest industries and employment, regulation of water supply and stream flow, etc. Public Law 273 of the United States and the Shelton Cooperative Sustained Yield Unit agreement may be availed of in drafting of the proposed legislation or executive proclamation.

3. The method of clear cutting by blocks or staggered settings may not be applicable in our dipterocarp forests due to the peculiar habits and characteristics of our dip-

terocarp species. Disturbance in the forest resulting from considerable opening and admission of direct sunlight as a result of logging is almost invariably followed by the invasion of second growth species which retard, if not entirely inhibit, the return of the dipterocarps within a reasonable length of time to permit a second and successive cuts based on sustained production. It seems apparent that light selection cutting is the system, through judicious marking, that may promote sustained production, first in the form of forest sanitation by cutting down trees of great risk. The idea is to preserve as much as possible conditions in the forest approaching that of the virgin state. A planting plan should, however, be provided for such areas needing artificial regeneration.

4. In my conversation with timber management personnel of the U.S. Forest Service in Missoula, Montana, Portland, Oregon and San Francisco, California, we discussed the immediate possibility of formulating timber

management plan for our dipterocarp forest. They seem to agree that it can easily be done provided that we are in possession of good basic data, especially on forest cover. They are also agreed that aerial photographs which is in common use in the United States will greatly help in doing away with tedious field work, although these photographs need to be checked and sampled right on the ground to secure the needed data for the preparation of such a timber management plan.

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Everyone is born with, or soon acquires, the qualities of love and hate, courage and fear, generosity and acquisitiveness, kindness and cruelty. All of these have their proper places in human equipment. We should hate poverty and disease; a child must fear some dangers in order to survive; the man with no acquisitive instinct cannot earn his living; the surgeon must often be cruel in order to cure. But when hate, fear, and cruelty are directed at other people, when acquisitiveness becomes greed, these qualities are out of place, and if people cannot control them they invariably unleash destructive tendencies. The creative qualities are love, courage, generosity and kindness.

—John F. Wharton in "Earning a Living."

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