The Need for the Protection and Wise Utilization of Our Forest Resources

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The task assigned to me this morning is a very pleasant one. That task is to present to the University of the Philippines and to the Department of Agriculture and Natural Resources in the name of PHILCUSA, the College of Forestry, the Forest Products Laboratory and the Forest Experiment Station buildings on this occasion of their inauguration and dedication.

I could, if I wanted to, cut short my part in this program by taking the line of least resistance, that is, confining my presentation remarks to one or two terse sentences, and then gracefully bowing out for the exit, but I am not in a hurry this morning.

For one thing, the purpose of this celebration holds for me, as it should for all of us, such a deep significance that I simply cannot take it lightly.

For another thing, the setting in which we are now assembled breathes with such a congenial and pleasant atmosphere that the temptation to drink of it to the brim is well nigh irresistible.

So with your kind indulgence I voluntarily succumb to the charms of this occasion and shall take advantage of the opportunity thereby afforded me to make a few remarks relevant and pertinent to the broader and deeper meaning of this celebration—that of underscoring and bringing to the fore the role of our forests in our economic life and the need for their effective protection and wise utilization.

Ours is among the few civilized countries that can still boast of their "forest primeval" sprawling over a wide area of their land territory.

We are told, without benefit of accurate exploration and survey, that our forests constitute 55% of the entire soil cover of the Philippines and that 38% of the 55% is commercial forest comprising almost 11.5 million hectares.

It has been estimated that the volume of standing timber in these forest areas is about 1,082,000,000 cu. m. with a total value of $\mathbb{P}27$ billion at the rate of $\mathbb{P}25$ per cu. m.

It is further said that this timber stock, 49% of which belongs to the Philippine mahogany group, if sawn into lumber will yield 270 billion board feet; that if all the timber were cut it would bring to the government in forest charges alone, almost $\mathbb{P}2$ billion.

There were in 1954, 1,590 timber licenses with capital amounting to P118 million; 433 sawmills with a daily capacity of 3.3 million board feet; 90,000 persons directly employed by the industry; and 500,000 people dependent upon the forest industries for their livelihood. The volume of timber and *lumber* exports in 1953 amounted to 526 million board feet and 64 million board feet, respectively, with an aggregate value of P62 million. Forest income derived from forest ir 1954 amounted to over P7 million.

All these are entirely apart from the indispensable role of forests in building and conserving our soil cover, in purifying and making wholesome the air that we breathe, in maintaining alive our rivers, brooks and springs which provide us one of the essential

* Presentation address on the occasion of the inauguration and dedication of the College of Forestry, Forest Products Laboratory and Forest Experiment Station Buildings, March 27, 1955. needs of daily life—drinking water—as well as water for other domestic purposes, water for irrigation, for generating hydro-electric power, and for industrial and other economic uses.

And yet in many respects no other natural resource is more neglected and more abused than the forest resources.

In the first place, our logging operation is a very destructive and wasteful process. No effort is made to cut only the useful timber and to protect the young trees. No tree is spared by the ax or the saw or by the falling timber which crushes all vegetation beneath it. Then almost invariably a logged area is entered by squatters who complete the devastation of the natural vegetative cover through caingin farming. There is no program of replanting the cut-over areas so that 50 or more years from now they might be ready for logging again. There is therefore a gradual and constant diminution of the forest capital.

And yet many lumbermen claim that we can go on cutting indefinitely at the present rate of 1.4 billion board feet per year on the assertion that forest grows at an alleged rate of 1.5% a year, or the equivalent of some four billion board feet increment in the timber capital annually.

This assumption, of course, is fallacious and dangerous to the extreme because: (1) there is no scientific proof that the correct rate of forest growth is really 1.5% (2) much of the forest area is inaccessible and cannot be logged; (3) increase in forest growth includes that made by trees not utilized for timber; and (4) the forest area is gradually receding through continuous logging operation without replenishment, and indeterminable forest destruction through caingin and other practices.

The last factor mentioned—forest destruction—deserves special consideration. It is a senseless practice, and, in unauthorized cases, criminal and punishable by law. Yet it goes merrily on.

Go to any part of this blessed land where

forests still stand and you will not fail to see illegal, indiscriminate cutting of trees and wanton devastation of forest cover outright vandalism—going on, sometimes just for the heck of it, but generally for the ever convenient excuse of making caingin in the name of food production It is immaterial to the forest vandals whether the subject of their vandalism is commercial forest or a national park, a forest reserve, or part of an area declared alienable or disposable for agricultural purposes. To many of our people, trees are there to be cut for any purpose legitimate or otherwise.

No sight is more sickening than a steep hillside denuded of forest cover just so it could be planted to some temporary crops like corn or camote for a brief period of time. After one or two, at most three, planting seasons, such denuded slopping areas become totally unproductive and are abandoned for new sites where the process is repeated. Eventually they are reduced to barren land and after further erosion, to jutting tocks and deep gullies, useless for anything save as grim reminders of man's senseless predilection for destroying things he ought really to preserve.

This type of illegal and unauthorized destruction of forests is rampant throughout the frontier areas where land hungry settlers are establishing themselves. The practice is spreading very fast ahead of land classification work, even in the so-called-inaccessible hinterland.

Of course we talk of forest protection, of land reclamation through reforestation and afforestation, of adopting soil conservation measures in land cultivation, but how far have our efforts gone to be really effective? I have it from Director Amos that at the present rate of progress of our reforestation activities—1000 Has. a year—it will take no less than 2,000 years to complete the job that awaits to be done right now, provided no additional areas are added to our already extensive barren land.

But that is just the trouble-the rate of

forest cover destruction is many times faster than the rate of reforestation and other forms of reclamation, including those accomplished by nature without any assistance from man.

Our efforts of construction pitted against the forces of destruction look puny and futile indeed. Herein lies one of our principal forestry problems.

The FOA-PHILCUSA aided project of Forest and Watershed Management which includes the rehabilitation of the College of Forestry and the Forest Experiment Station Buildings is aimed at meeting this problem squarely.

The hour is late for (1) taking inventory of the growing stocks and setting the boundaries of public forests intended for protection, recreation, exploitation and pasture purposes; (2) for setting up an adequate organization for the protection of public forest from fires, illegal cutting and other forms of forest destruction; (3) for stimulating and expanding the rate of reforestation of denuded watersheds, cut-over areas, barren and grasslands; (4) for conducting studies on factors responsible for the establishment of natural and artificial reproduction in cut-over areas and growth yield of growing stocks needed in determining annual allowance cut

The government forces entrusted with this extensive and all-important job are too inadequate to cope with the situation. Therefore, one of the principal objectives of the rehabilitation of the College of Forestry is to enable it to accommodate more students and turn out more graduates needed for strengthening these forces.

Of course the Forest Products Laboratory, as its name implies, is aimed at both fundamental and applied research on forest products utilization.

Right now, there is altogether too much waste in our methods of utilizing forest products, or rather in the non-utilization of a great variety of raw materials available in our forests. Perhaps, outside the exclusive group of foresters and forest botanists, not very many people know that in our forests there are no less than 2,000 species of trees, but only about 60 species are utilized for lumber. The rest of the species find no definite use at present in our limited scope of forest products utilization and are left to die and rot.

In lumber manufacture only 250 board feet out of every 1,000 board feet of tree, or 25%, is utilized. Of forest products other than timber, very few find some use, and those used are not even well utilized.

The newly built Forest Products Laboratory, probably one of the best and most modern forest product laboratories anywhere in the world, well-equipped to carry out basic research that will help industrialists in putting up lumber and allied factories for the manufacture of exportable wood products instead of raw materials. It will explore the possibilities of industrial development based on the utilization of other forest products not now utilized. Thus the Laboratory will (1) test more tree species for lumber or other uses such as for athletic equipment, tool handles, furniture, matches, plywood, pulp, and plastics, and (2) work out marketable uses for many oil-bearing nuts, resins, wood oils, dye barks, rattans, nipa sap, bur fibers, bamboo, gutta percha and so on.

Over one half million dollars of United States assistance have been allocated to these projects up to FY 1956. The peso support from CP funds and special appropriations up to the end of this fiscal year amounts to more than $\mathbb{P}2$ million. More is coming. This substantial investment is many times justified, considering the nature, the scope, the importance to our economy and the urgency of the various activities now being undertaken and to be undertaken in the years to come under these projects. We are proud to have some part in this undertaking.

Now for the task assigned to me-Mr. President Tan, Mr. Secretary Araneta, in the

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name of the PHILCUSA, it is my extreme pleasure to have the privilege of presenting to you as representatives respectively, University of of the the Philippines and the Department of Agriculture and Natural Resources, these buildings-the College of Forestry, the Forest Products Laboratory, and the Forest Experiment Station Buildings-which we are now inaugurating in solemn dedication to the cause of human progress in the field of Forestry.

By these new and imposing structures established with American financial and technical assistance matched by Philippine pesos and enterprise, we have forged another link in the chain that binds the United States and the Philippines into a solid partnership for the uplift of living conditions and the strengthening of democratic institutions in this part of the world.

They also symbolize the finest spirit of cooperation among the Foreign Operations Administration Mission, the Philippine Council for United States Aid, and the Department of Agriculture and Natural Resources and the University of the Philippines through the Bureau of Forestry and the College of Forestry which, as the beneficiaries of these new instruments of progress must assume the corresponding responsibility for their proper use in the advancement of scientific knowledge in Forestry and in the employment of that knowledge for the country's economic growth and the people's welfare, through the adoption and enforcement of sound and constructive policies of effective forest protection, conservation and wise utilization.

May the harvest be full, responsive to our needs, and useful to our legitimate struggles and onward forevermore.

Japan Has Land Greening Campaign

A nationwide land "greening campaign" every year is a feature of Japanese forestry, according to Nicolas P. Lansigan who arrived from Japan as a member of the Philippine delegation to the Asia-Pacific forestry commission. The campaign is directed at restoring a green tree vegetation on deforested areas of the country and for the beautification of public places.

Lansigan reported that where in the Philippines men and women sport "red feathers" during fund raising campaign for charities, in Japan during the month of April the people have "green feathers" on their breasts. Last year more than eleven million feathers were sold and the fund raised amounted to 109 million yen (approximately P600,000). The money is used for the beautification of school premises, streets and highways, national parks and other public places.

The national land greening campaign, which really corresponds to arbor day in western countries, lasts for one week. Each of the seven days is devoted to a greening day, workshop greening day, mountain greening day, traffic greening day, school greening day, and greening tree protection day.

Lansigan said he will report his observations to the Philippine national arbor week committee now planning a big countrywide observance from July 24 to 30.

It is significant that the Emperor and Empress of Japan usually lead in this national observance. As a result of this movement, started after the war, around 10,000 hectares have been planted. During the week, ceremonies include the awarding of prizes for winning slogans and songs on forest and trees, commending in public assemblies of persons who distinguish themselves in the greening movements, and mass meetings explaining the role of trees and forests in the life of the people.

There is a wonderful mystical law of nature that the three things we crave most in life— happiness, freedom and peace of mind—are always attained by giving them to someone else.