

# FORESTRY LEAVES

MAY 4 - 1964

Official Publication of the Alumni and Student Body  
U.P. College of Forestry, College, Laguna



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# TEN GREAT VERRBS OF LIFE

- I AM:           The power of self-knowledge
- I THINK:        The power to investigate
- I KNOW:        The power to master facts
- I FEEL:         The power to appreciate, to value, to love
- I WONDER:      The spirit of reverence, curiosity, worship
- I SEE:          The power of insight, imagination, vision
- I BELIEVE:     The power of adventurous faith
- I CAN:          The power of conscience, the moral imperative
- I WILL:         The power of will, loyalty to duty, consecration
- I SERVE:        The power to be useful, devotion to a cause.

— *G. W. Fisher*



**Office of the President  
of the Philippines**

**M E S S A G E**

I am pleased to extend my greetings to the members of the 1963 class of the University of the Philippines College of Forestry on the occasion of their graduation.

As the graduates reach another milestone in their quest for knowledge, perhaps it would be fitting to remind them of the new and greater challenges that await them as they leave their alma mater. I trust that the U.P. College of Forestry has equipped them with the necessary tools to carve out their destiny in life: knowledge, determination and fortitude. Armed with these ideas and ideals, they will be in a position to go out into the world and meet its many challenges.

The Philippines has need for qualified men of their profession to help preserve one of her greatest natural treasures, her forests. It is thus my hope that the graduates will use the training they have just acquired for the benefit and welfare of their country.

  
PRESIDENT OF THE PHILIPPINES



Office of the Vice President  
of the Philippines  
Malacañang

M E S S A G E

It gives me great pleasure to extend my heartfelt congratulations to the 1963 graduates of the University of the Philippines College of Forestry.

On this auspicious and memorable occasion in your young lives, as you are about to sally forth into the world, I would like to remind you of your obligation to your family, to country and to God to strive for the best in everything you do. Put your skills, talents and youthful energies to good use by helping to bring growth and progress to the Philippines. As you help your country, so also do you help yourself.

Good luck and best wishes for the future.

  
EMMANUEL PELAEZ



Republic of the Philippines  
Office of the  
President of the Senate

M E S S A G E

TO THE 1963 GRADUATES:

Congratulations on your graduation!

I am happy to note that you, the graduates, will soon join the mass of responsible people to embark upon the task of building a better and more progressive Philippines. The transition may be hard, uncertain and at times, bleak, but with little perseverance and dedication I am sure the going will soon be easy.

Wherever the call of service may beckon you to be - be it in the backwoods of our country where the opportunities await your trained and skilled hands, or in the cities where you get enmeshed in the maelstrom of a fast moving life, the knowledge you have gained in your four years' stay in the College of Forestry, University of the Philippines will be your strength, your power and your guiding light in grappling with the exigencies of the hour. I enjoin you, therefore, to persevere.

Again, my congratulations and best wishes.

  
FERDINAND E. MARCOS

April 20, 1963  
Philippine Senate, Manila



REPUBLIC OF THE PHILIPPINES  
HOUSE OF REPRESENTATIVES  
OFFICE OF THE SPEAKER  
MANILA

*Hon. Cornelio J. Villareal*  
SPEAKER

M E S S A G E

I wish to convey my warmest congratulations to the graduating class of the College of Forestry of the University of the Philippines.

They are an added asset to the country. Their training in college, viewed in the light of the country's needs, is vital considering that we need the scientific mind in the exploitation and preservation of our forests.

Graduates of forestry are needed both in public offices and private firms. They should be able to find their proper place in the scheme of things. But wherever they find themselves eventually, they are bound to lead great impact upon certain values that our people need to know about our forests.

I wish this year's graduates the best of luck. They have chosen a great profession.

CORNELIO J. VILLAREAL  
Speaker



**Republic of the Philippines**  
**Department of Agriculture and Natural Resources**  
**Office of the Secretary**  
**Dilliman, Quezon City**

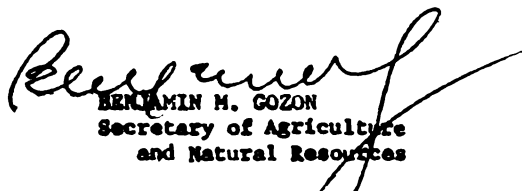
On the occasion of this year's graduation exercises of the College of Forestry, University of the Philippines, I take pleasure in joining with its 1963 graduates, faculty and student body in their rejoicing over the completion of their four-year course in forestry, a period characterized by work and diligent efforts in overcoming the hardship and difficulties of college life.

From a theoretical confine you will enter into a practical world. But with your technical knowledge and training in this great institution and with the difficulties and hardship which tempered you during these long years, there is no reason why you will not succeed in life.

You have chosen forestry, a course which to my mind is very important and is badly needed by the government in the development of our forestry resources and by the lumber industry in the wise utilization of these resources. Whether you join the government or the private sector, you will be rendering service to our country by helping in the prosecution of the socio-economic development program of the present Administration.

We have rich forestry resources but if we do not conserve and utilize them properly thru known scientific methods, we may eventually lose this important resources. Wanton destruction of our forest areas through illegal cutting and kaining making is causing so many problem of flood, and shortage of water for household and for irrigation purposes and other problems affecting agricultural productivity. The country needs your services in stopping these illegal practices.

I wish to take this opportunity of extending my greetings and congratulations for your hard-earned achievement and hope that you will use your talent in helping conserve and safeguard the country's natural wealth particularly its forest resources.

  
**BENJAMIN M. GOZON**  
**Secretary of Agriculture**  
**and Natural Resources**



REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES  
BUREAU OF FORESTRY  
MANILA



IN REPLY, ADDRESS  
DIRECTOR OF FORESTRY  
MANILA, PHILIPPINES  
P. O. Box 2069

Z - Graduation Message  
(UP College of Forestry)

April 18, 1963

M E S S A G E

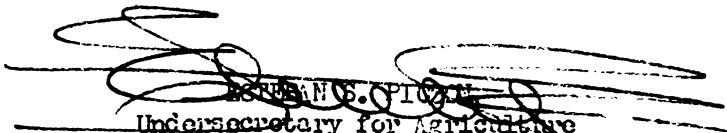
I felicitate you through the Forestry Leaves on the occasion of your "Moving-Up Day."

You have appropriately called your graduation "Moving-Up Day." For in this world, one must always strive to move-up if he desires to enjoy to the fullest the fleeting life on earth. And one can enjoy life only if he makes himself useful to his country and people.

I have heard a lot about the sterling qualities that make up the character of foresters. With my short stay in the Bureau of Forestry as concurrent director, I have observed that the guardians of the country's vast forest wealth are men who are capable of meeting any challenge in the field of public service.

I am sure that the character into which foresters have been moulded was developed while they were in the U.P. College of Forestry at Los Baños, Laguna. There is no doubt that the present crop of graduates is composed of the same kind.

May you keep on moving-up to the acme of success!

  
ESTEBAN S. PICSON  
Undersecretary for Agriculture  
Concurrently Acting Director of Forestry





UNIVERSITY OF THE PHILIPPINES  
QUEZON CITY

OFFICE OF THE PRESIDENT

M E S S A G E

Moving-Up Day, which is the Forestry students synonym for graduation, is a well-chosen phrase. I wish indeed that it is more widely used among our studentry. Leaving college means leaving the security of campus and academic life and moving up, as it were, to the larger world where one's mettle is tested in due course. I have no doubt that you will find that encounter inspiring and that the training that you have just received will prove to be of adequate value so that you will continue to push further and enlarge your field of activity and usefulness to our society.

To this year's graduates of the University of the Philippines College of Forestry, my heartiest congratulations.

*Carlos T. Romulo*



REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES  
REFORESTATION ADMINISTRATION  
DILIMAN, QUEZON CITY

In reply, address:  
P. O. Box 2363, MANILA

TEL. No. 7-90-47 LOCAL 21

M E S S A G E

I am happy to convey my felicitations to the 1963 graduates of the U. P. College of Forestry.

In my last year's message to the graduates, I have counseled them with this: "Your destiny is in the hallow of your palm. If you want to succeed, remember that there is no substitute for hard work and resourcefulness. Do not gamble your future by relying on good luck to knock at your doors. If opportunity does not come to you, create the opportunity. If we want the forestry profession to be respected, let us take the initiative to raise the standard of morality within our circle. Let it be said that where a forester goes, there goes an honest and upright man."

This year, I would like to transmit the same words of advice to you, but I have this to add: You, being still young, are endowed with ample strength, determination and zeal to achieve your ideals. But, in the process, there would be persons who would deliberately obstruct your progress by casting aspersions on your honesty and integrity, sincerity and loyalty to the organization you belong. Do not be disappointed or discouraged, tarry not, but forge ahead those persons who are transgressing the Commandment of God which says, "Thou shalt not bear false witness against thy neighbor", will surely get their just due

As foresters, you should impose upon yourselves the patriotic duty of helping conserve the forest resources and explaining to the people how these resources are contributing to the economic uplift and well-being of the people. In accomplishing these, you can cherish the thought that you are not only helping the country by promoting a better relationship between the people and the government but also taking active part in the pursuit of the nation's aspirations.

May you succeed in your endeavors in the years to come.

  
JOSE VIADO  
Administrator



REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES  
PARKS AND WILDLIFE OFFICE  
MANILA

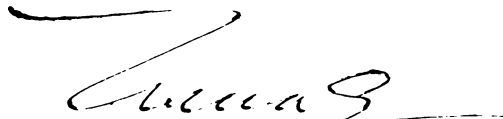
M E S S A G E

The Nation's progress, socially and economically depends to a large extent on the proper and wise use of our natural resources.

Developments in the forest scene over the years point to one glaring fact - that there is a crying need for the conservation of our dwindling forest resources.

That's where You, Forestry Graduates, the pillars of our country's greatest patrimony come in. The job ahead is big. For in your hands lay our country's hope for a dynamic forest conservation movement. Your training is such that no task is so great that would not fall under your unwavering determination.

To each and everyone of you, my congratulations and best wishes for fruitful years ahead. Carry on!

  
VICENTE DE LA CRUZ  
Director



University of the Philippines  
COLLEGE OF FORESTRY  
COLLEGE, LAGUNA

M E S S A G E

The celebration of the "Moving-Up Day" is a happy occasion - it is the moving up of the seniors (B.S.F. and Rangers) to the status of responsibility as professionals and technicians - the moving up from the status of dependence to the status of independence. During your stay in this College you have always been on the receiving end. You were not only economically dependent on your parents but you were also intellectually dependent on your mentors. It is now your turn to give, to show that all the years of your training have not been for naught. It is your turn to join us in the important task of meeting the challenge of the future - the conservation of nature's legacy to our country - our heritage of forest resources.

  
GREGORIO ZAMUCO

D e a n

# Let Us Develop Our Wood Industries<sup>1</sup>

My friends:

There are very important reasons for me to be happy in being with you this morning. First, I was in the lumber business before I became secretary of public works and communication. And second, I am still keenly interested in our forest resources. You can understand, therefore, my sincerest appreciation for this opportunity to address you.

To you who graduate this year, this is moving out day. There are things and events on this campus to which you have attached sentimental value. It is sad to leave these things behind. But, certainly, there are knowledges you gathered while here. These you can leave behind and still take them with you. It is of these things I would like to talk about.

The forest industries are a really major industry in our country. In our statistics, the wood industries are marked as the third biggest dollar earners. In logging alone, there are more or less 500 thousand people that depend on it directly or indirectly for livelihood.

Let us look more closely at our income earners in the wood sector.

The total production of logs in the fiscal year, 1961-62, June 30, 1961 to July 1, 1962, a period of one year, was 2.9 billion board feet. This was valued at ₱258.4 million. Of this, 1.6 billion board feet was exported, valued at ₱215.8 million.

In other words, 1.3 billion board feet were consumed locally, valued at ₱42.6 million.

You will realize from these figures that earnings from local sales of logs are very small.

But let us look at the processing wood industries.

For the same year, 406.1 million board feet of lumber were produced. This was valued at ₱81.2 million.

On the other hand, 316.7 million square feet of plywood were produced by 18 processing plants, valued at ₱57 million. And 398.9 million square feet of veneer were manufactured, valued at ₱11.9 million.

The total export earnings from lumber, plywood and veneer was valued at ₱37.4 million, which is only 17 per cent of the total earnings from log exports. And the total log consumption of the three industries do not even consume 60 per cent of the total board feet of logs consumed locally.

I made mention of these observations because they are pertinent guides to policy formulation. There are those, for example, who would advocate banning the exportation of logs. Considering the country's need for foreign exchange, the requirements for machinery of industrialization, and the investments now pooled in logging operations, such measures as banning log exportation, against the observations made, are considered unwise if not altogether preposterous.

In the development of the wood industries, the problems really lie in forest management, utilization and law enforcement. The solution of the problems met in these areas will lead to forest conservation, greater employing capacity of forest industries,

<sup>1</sup> Speech delivered by the Hon., the Secretary of Public Works and Communications, Brigido R. Valencia on the occasion of the College of Forestry Moving-Up Day on March 30, 1963 at the Forestry Auditorium.

and bigger income for people in the industries.

It is unfair to say logging is the cause of floods, which exact painful losses in life and property. Nor is it fair to blame those engaged in the industry for these floods. There are, natural causes which bring about floods. The Agusan valley, for example, has continually been flooded even before extensive logging operations came about in that area.

You who graduate this year can do much to help clear the misunderstanding of the position of loggers in the flood problem of the country. You have a big stake here. The wood industries promise to be major industries in the immediate years ahead. And you are the people that can come in properly in this field.

I was made to understand you have two curricula: one on forest management and one on wood utilization and engineering. The things I am about to discuss, therefore, will not be unfamiliar to you.

### FOREST MANAGEMENT

Conservation of our forest is a national concern, it is the responsibility of every citizen of this country. For indeed, once our watersheds are gone and our hills and mountains become bald, then inundations are inevitable. And this means tremendous losses in life and property, if not the sinking of the entire nation.

But those engaged in the wood industries are not only concerned with floods but also with profits and continuing operations. With this understood, it is reasonable to say they are most concerned with forest conservation. The raw materials of their industries come from the forest.

Thus, you will observe that loggers in the country that make of logging an industry and a continuing source of income practice forest conserving methods of operation.

You can go to areas in Mindanao today and you will find logging companies that practice selective logging. This method, as I would believe you all know, looks forward to perpetual yield. The natural capacity of the forest to rehabilitate itself is given full pay. It is presumed that before an area is completely logged over, the logged-over areas are again ready for harvest.

Selective logging, which comes under forest management, insures conservation of forest resources. With this method becoming a universal practice among loggers who would not care to lose investment and looks forward to continuing operations, it is inconceivable how deforestation can be blamed on them.

### THE DESTROYERS

But there are groups that despoil our forests. These are the kaingineros, the illegal timber cutters, and the dummies of certain alien interests.

The kaingineros may only have survival as reason for indiscriminate felling of trees and destruction of forested areas. But just the same, they make bald hills and mountains.

Illegal timber cutters have only for reason profits. The same is true with dummies of alien capital. They really do not care if there are forests now and there are none tomorrow. Unless these groups are checked and eliminated, forests will be destroyed and hills and mountains bald. Then we shall really be endangered by more destructive inundations.

### LAW ENFORCEMENT

The enforcement of our laws on forest resources and their utilization is a major factor in forest conservation. It is as much a factor in wise and profitable utilization.

The following, I believe, should be enforced strictly:

1. Licensing, by seeing to it that licenses are granted to companies or per-

*(Continued on page 44)*

# *Policies of the Reforestation Administration in Implementing the Five-Year Socio-Economic Program*

*By*

CARLOS CUNANAN  
*Deputy Administrator*  
*Reforestation Administration*

Reforestation in our country is a gigantic task on account of the vastness of barren forest lands aggregating 1,390,600 hectares. Because of the existence of denuded areas, floods are aggravated, soil erosion on bare and almost bare mountains occurs whenever it rains, and there is shortage of water during dry season. The adverse effects of floods and drought constitute a growing menace that threatens to undermine the social and economic security of the nation.

The consensus in the nation today is that reforestation of barren forest lands is necessary if the adverse effects of the continued existence of these idle lands could be prevented or at least minimized. As a consequence, the appropriation of the agency increased from ₱4 million last fiscal year to ₱7.4 million this current fiscal year. With this amount we expect to reforest 46,835 hectares. On account of the importance and scope of reforestation, the agency has been assigned the task of synchronizing its activities with the implementation of the 5-Year Socio-Economic Program. Accordingly, the agency has promulgated policies as basis for its various activities.

The program has three broad objectives, namely: (1) to restore immediately economic stability; (2) to alleviate the plight of the common man; and (3) to establish a dynamic basis for future growth.

The Reforestation Administration may not be able to contribute much to the attainment of the first objective as reforestation is a slow process, and takes years before results are obtained but in the case of the last two objectives, it can do much.

Unlike in the United States and European countries where reforestation is being done with the aid of heavy machineries and airplanes, here it is being done purely by manual labor. A great number of manpower is needed in the planting of trees. It will be then one of the policies of the agency to employ as many casual laborers as possible, depending on the availability of funds, in the planting of trees, raising seedlings in the nurseries, protecting the plantations and many other reforestation activities. Inasmuch as the agency will also receive additional amount from the Emergency Employment Administration (EEA), it is expected that the plight of thousands of poor, jobless people will be very much alleviated. The agency has at present 61 reforestation projects located in different parts of the country.

Last fiscal year (1961-62), the agency was able to employ 32,000 casual laborers in its projects. This current fiscal year, its appropriation being bigger, the agency could employ almost twice the number. But granting that the laborers will not be rotated so frequently, and will be allowed to work

continuously for 20 working days every month throughout the year, there will be about 4,397 laborers to work in the projects. If they are to be rotated every three months the figure will be increased to 17,588. This number does not include the laborers that could be hired out of the funds to be provided by the EEA.

The laborers to be hired for reforestation purposes are from all sections of the country. To give a better idea where the agency distributes benefits in the form of employment opportunities, the zonification of the reforestation projects in the Philippines are hereby enumerated:

*Region I*, with headquarters at Dagupan City, comprises the provinces of Ilocos Norte, Ilocos Sur, Abra, La Union, Mt. Province, Pangasinan, Zambales, Tarlac, and the cities of Baguio and Dagupan.

*Region II*, with headquarters at Tuguegarao, comprises the provinces of Cagayan, Isabela, Nueva Vizcaya and Batanes.

*Region III*, with headquarters at Dili-man, Quezon City, comprises the provinces of Nueva Ecija, Pampanga, Bulacan, Batanan, Cavite, Batangas, Quezon, Rizal, Laguna, Mindoro Occidental, Mindoro Oriental, and the cities of Manila, Caloocan, Quezon, San Pablo, Pasay, Cabanatuan, Lucena, Cavite, Trece Martires, and Tagaytay.

*Region IV*, with headquarters at Naga City, comprises the provinces of Camarines Norte, Camarines Sur, Albay, Sorsogon, Catanduanes, Marinduque, and the cities of Legaspi and Naga.

*Region V*, with headquarters at Iloilo City, comprises the provinces of Aklan, Antique, Capiz, Iloilo, Occidental Negros, Romblon, Palawan, and the cities of Bacolod, San Carlos, Silay, and Roxas.

*Region VI*, with headquarters at Cebu City, comprises the provinces of Samar, Masbate, Leyte, Cebu, Bohol, Oriental Negros, and the cities of Toledo, Danao, Calbayog, Dumaguete, Tacloban, and Ormoc.

*Region VII*, with headquarters at Zamboanga City, comprises the provinces of Zamboanga del Sur, Zamboanga del Norte, Misamis Occidental, Lanao del Norte, Lanao del Sur, and the cities of Marawi, Iligan, Ozamis, Zamboanga, and Basilan.

*Region VIII*, with headquarters at Davao City, comprises the provinces of Cotabato, Davao, Bukidnon, Oriental Misamis, Surigao del Norte, Surigao del Sur, Agusan, and the cities of Butuan, Cagayan de Oro, Gingoog, Cotabato, and Davao.

Another policy of the agency is geared to the third objective, i.e., the establishment of a dynamic basis for future growth. The Philippines today, according to President Macapagal, is well on the way to devastating her magnificent forest resource. His view is shared by foreign forestry experts who have visited this country and seen the condition of our existing forests. Forest destruction is jeopardizing the future of the lumber industry, our third major export in which half a million people depend for direct livelihood. If this destruction should continue, time will come that our forests cannot permanently provide for the demand of the expanding economy of tomorrow's population. It is, therefore, essential that the trees destroyed every year should be replenished to maintain the timber resource of the country for economic and social stability.

With the massive reforestation work now underway, the millions of trees planted will undoubtedly produce future raw materials for wood-using industries and allied enterprises as well as intangible benefits which only a forest could provide, and which money alone could not buy. At present, there is under maintenance and protection a total of 68,455 hectares of established plantations in all the reforestation projects scattered over the country containing about 151 million trees of various species with different heights and diameters. With the current goal of 46,835 hectares to be reforested, approximately 95 million trees will be planted. It is easy to visualize then the future po-



tentials of the barren lands planted with trees, as these will eventually turn idle lands into forests—liability into asset.

With the financial cooperation extended by the EEA to the agency, additional laborers paid out of the funds provided by it, will be able to reforest about 14,000 hectares with 11,704,000 tree seedlings. All in all, there will be reforested about 60,800 hectares with approximately 110 million living trees this current year.

Based on the 5-year reforestation program of the agency which jibes with the 5-Year Socio-Economic Program, at the end of the 5th year, there will be no less than 636 million trees in the bare hillsides. By that time, the otherwise barren lands would be virtual forests. The vegetation would be minimizing soil erosion, augmenting the supply of water to streams and rivers, and affording direct and indirect benefits. Several species could be harvested to provide raw materials for wood-using industries. Conservative estimates easily place its total value to ₱250 million against the total expenditure of ₱76 million. And in about 30 years the commercial species could be harvested as timber. This is how reforestation helps in the attainment of the third objective of the program, *to establish a dynamic future growth.*

In gearing reforestation to the socio-economic program, the Reforestation Administration follows certain policies in pursuing its activities. For example, in reforesting a barren area, it is guided with the following criteria:

1. to insure continuity of water supply for hydro-electric power, irrigation, and industrial and domestic uses;
2. to raise timber and minor species needed by wood-using industries and allied enterprises; and
3. to establish soil cover to prevent or at least minimize soil erosion on bare or nearly bare hillsides which des-

troys farms and causes siltation of rivers and dams.

However, due to lack of funds for an all-out reforestation, the agency cannot undertake massive reforestation in all places where vast barren lands exist. This being the case, higher priority is given to areas in watersheds which need some degree of reforestation, because of their location and impact on the welfare of a greater number of people and on the national economy. Among such critical areas, for instance, where preferential attention must be given are the watersheds of the Agno River, where water must be conserved to maintain the chain of operating hydroelectric power and irrigation systems, and at the same time minimize danger from destructive floods. Cooperative work is also being undertaken by different public institutions and schools to facilitate reforestation. Likewise, cooperative work is also carried out by civic, religious and charitable organizations and associations, private agencies and individuals to achieve the same objective. In addition, the people are being encouraged to plant quick-cash forest crops for firewood to supply the needs of nearby wood-using plants, while the wood-using industries are encouraged to undertake large scale reforestation work to supply their plants with the needed wood and raw materials.

The Reforestation Administration though relatively a new agency, is a dynamic organization and as such, it must undergo changes and developments. Consequently, it has pressing problems to solve as:

(1) Appropriation. This is the most vital of them all for the extent of area reforested depends on appropriation. The launching of the 5-Year Socio-Economic Program makes it possible for the agency to step-up its accomplishments not only this current year, but in the succeeding years if financial support will be continued.

(2) Public support and cooperation. The degree of success of reforestation will, in a

large measure, depend upon the public attitude on the work now being undertaken. The people in the rural areas need to be convinced of the evil of kaingin-making and the adverse effects of forest destruction. They should be enjoined to help in the apprehension of kaingineros and other forest violators. The cooperation of the citizens of the province where the reforestation projects are located is needed to protect the projects from those who might ruin their existence. In fact, in all activities of reforestation, complete and unstinted public support and cooperation is necessary. Time, money and effort are, of course, very essential elements *underscored* for they are the very core around which the successful operation of the project revolves. Without these, our attempt in converting the barren lands of the country into an asset will be a continuing struggle with odds against the government.

(3) The kaingineros, the squatters and other illegal occupants of the reforestation projects pose a very serious problem as they are hampering the progress of reforestation in the Philippines.

In my mind, the solution of this problem, besides bringing them to court, should be to settle them to places where NARRA projects are located or to give them employment as emergency laborers in the project where they are found, or to allocate lands fitted to agriculture outside the reforestation projects.

(4) Lack of technical personnel is felt by the agency. Reforestation is not only planting but it also involves technical work which only forestry graduates could undertake. The technical personnel would not only facilitate reforestation but would also be able to fit properly the work to the Socio-Economic Program.

(5) The agency lacks vehicles and other equipments for the use in reforestation pro-

jects and regional offices. The vehicles are essential in supervision, in transporting planting stocks, equipment, and personnel. The appropriation of the agency will not permit the purchase of needed vehicles and equipments all in one budgetary year, and as a result, the lack of these jeopardizes the service in some remote places.

(6) The synchronization of the activities between the Bureau of Forestry and the Reforestation Administration in matters regarding the limitations of forest lands and issuance of pasture and special use permits is a *must* if the service is to succeed. The work of the agency is sometimes misunderstood. There are cases when forest lands which ought to be reforested and retained for forest purposes are released as alienable and disposable blocks. Before the creation of this agency, the areas set aside by the Bureau of Forestry as needing reforestation was 1,390,600 hectares. But actually, there is only an area of a little over half a million hectares that are occupied by the different reforestation projects. Because of this, some projects could not proceed on reforesting, as the lands to be planted are under pasture. The only solution to this problem is for the top-men of the two agencies concerned, the Bureau of Forestry and the Reforestation Administration, to sit down, put their heads together, and thresh out the problem.

In a nutshell, the policies of the Reforestation Administration in gearing its activities to the 5-Year Socio-Economic Program of President Macapagal will help in the implementation of the program so as to achieve its objectives. Within the appropriation given to it annually and with the help of the EEA, it is hoped that a substantial contribution could be made towards the success of this program.

# The Role of the U.P. College of Forestry In the Industrial Development of Philippine Wood Industries<sup>1</sup>

BY  
RODOLFO C. C. YAPTENCO<sup>2</sup>

The College of Forestry has always performed a double role in relation to the local wood industry, firstly as a source of technical men and secondly, as a center for basic and applied research in all aspects of forestry.

In the early years of the College and until 1959, students were trained in general forestry with emphasis on forest management. With the increase in woodworking factories in the early fifties, however, there was a clamor for technical men trained in wood products manufacturing. To meet this demand, the College of Forestry, with the help of the visiting professors of the then U.P.—USICA/Cornell Contract (now U.P.-USAID/State University of New York Contract), laid the groundwork for the creation of a curriculum in forest utilization in 1958. Then in 1959 the College adopted the first curriculum in forest utilization engineering patterned after those existing in the United States and at the same time revised the existing curriculum in general forestry to give more emphasis to forest management. Thus, the College now has two curriculums: one for training students in the proper management of forests, and another for training students in the efficient utilization of products derived from these forests. Since then, the effectiveness of these curriculums has been

the object of constant study. Both have undergone minor changes in 1960 and are at present being upgraded to orient them to Philippine conditions and current needs.

In the area of utilization which was started only four years ago, I am happy to report that the first batch of three forest utilization majors graduated last April 7. Incidentally, all three of them belong to the upper 10% of this year's graduating class of the College, one of them graduating *cum laude*. The enrollment in this curriculum is increasing as indicated by the number of sophomores and juniors now registered with the department of Forest Utilization Engineering. Given another two years, I believe the College can start supplying the wood industry with a significant number of "wood products engineers."

As end users of our products, you might be interested in the courses and training we give our students. For this purpose, attached to copies of my paper is a copy of the proposed revised curriculum for forest utilization, a copy of the existing curriculum for forest resource management, and a description of courses included in them for your scrutiny.<sup>3</sup> We would appreciate suggestions from you on courses which you feel are important and should be incorporated therein. No doubt, not all your suggestions can be accommodated as we are limited by the number of years we

<sup>1</sup> Presented during the Third Annual National Convention of Log Producers and Wood Processors in Zamboanga City on May 3-5, 1963.

<sup>2</sup> Associate Professor of Forest Products, College of Forestry, University of the Philippines.

<sup>3</sup> Copies are available from the Secretary, U.P. College of Forestry, College, Laguna upon request.

can hold the students in college and limited personnel and facilities. But we would consider each case with thoroughness with the end in view of serving better the interests of the wood industry.

Another development which I am sure will interest concessionaires is the possibility of instituting a separate curriculum option in Logging Engineering. Although still in the preliminary planning stage, there is no reason whatsoever why it cannot become a reality if we get the necessary support.

To further strengthen our program of providing the industry with highly qualified men, the College of Forestry is now laying the foundations for a graduate program both in forest management and forest utilization. Planned to be in operation by July 1, 1963 this program will provide opportunities for our graduates to go into specialization and for your promising employees to take formal and advanced training in the fundamentals of managing your forests and manufacturing your various products better. Of course, we cannot cover all areas at the start, but with the support of the government and yours and the continued training of our faculty abroad, we hope to attain a more expanded graduate program sooner than you may expect. In addition, we intend to sponsor more seminars and short courses in cooperation with the Bureau of Forestry, the Forest Products Research Institute, and the Reforestation Administration to provide opportunities for some of your key men, who are indispensable to your operations, to keep up with recent developments in forest management and utilization.

Carrying out the program of teaching and research at the College at present are 47 members of the faculty. Of this number, about 70% have advanced degrees from abroad or are currently working for advanced degrees in the United States. This percentage increases every year as more leave for and more return from study grants abroad. This is a

tremendous increase compared to the faculty membership of 12 five years ago when the College of Forestry was transferred from the Bureau of Forestry to the University of the Philippines. The College is still in the process of expanding its faculty with an immediate goal of about 70 in 1966 and will continue to do so until the balance between supply and demand has been achieved. Faculty assignments now are distributed roughly into four areas: 20 in forest management, 11 in forest utilization, 11 in general education and basic arts and sciences, and 5 in public information and extension.

One drawback in the College's teaching function is the lack of promising materials for prospective foresters. Just as you need good logs to produce quality products inexpensively, we likewise need good students to produce highly qualified forest managers and wood products engineers. We are trying to recruit promising high school graduates by informing them of the potentials of the forestry profession and by making available to them as many scholarships as we can solicit from the government, the wood industry, and other agencies. I am sure that this Chamber can help us in this undertaking not only by helping us popularize the forestry profession but also by granting scholarships which we can use for attracting good students. There are only three scholarship grants from private companies at present compared to about thirty from the Bureau of Forestry available to students of high scholastic standing. The Bureau of Forestry scholarships, however, require recipients to serve the Philippine government 1-1/2 years for every year enjoyed under the scholarship. This makes a great majority of the cream of the graduating class unavailable for the wood industry for from 2 to 7 years.

In the area of research, the College has progressed little in the last five years mainly because of the greater urgency of

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# On Employee Development

BY ABELARDO SUBIDO  
*Civil Service Commissioner*

A previous commitment which I have to fulfill has deprived me of the occasion to come and talk to you. It would have been my pleasure to be here with you today. I like the company of government workers who have that insatiable hunger for self-development and professional growth.

Nevertheless, I am extending to you my congratulations on your graduation. To the Forest Products Research Institute, I have a special commendation to give for being one of the most in-service training-conscious agencies in the government today.

Education is a life-long pursuit. The man who allows himself to lag behind the changing times, who fails to catch up with the rapid evolution of ideas, will one day find himself a lonely man.

To be both productive and useful, a government employee must be equal to the demands of progress. Human nature is such that once a person becomes satisfied with a certain situation or a certain state of mind, complacency sets in and that government employee inevitably and helplessly finds himself in a rut.

In the sphere of governmental activity, in-service training provides a leverage for improvement. Because progress connotes a continuing search for new ideas, the government employee will find that there will always be room for new, improved methods and space for mental replenishment no matter how routinary and trite his duties may be.

It is of course understood that the development of the human being, to bring out the best in him, is the pivotal step in any successful undertaking. Conduct, behavior, attitudes—these are the foundations which must first be laid down solidly. It is not enough that an employee know the intricacies of his job. It is also important that his personality be so developed that he can be in a position to respond, fully and well, to the emergent needs of the service.

Employee development is a basic training course for it aims to make an employee not only useful but also desirable. No amount of competence or qualification for a job will be enough if, as a human being, the employee is a flop, if his relationship with his co-workers and the public is far from being wholesome and if his attitude towards his job is one of apathy and indifference.

When the new Civil Service Law set forth four words to describe the civil service, it meant to all intents and purposes, you and I. When it explicitly provided for the maintenance of “an honest, efficient, progressive and courteous civil service”, it meant an honest, efficient, progressive and courteous government employee.

All the do's and don'ts that we are now supposed to observe are not new. They all spring from the elementary virtues which have not basically changed. But their reiteration is actually a demand for continuous practice and application on our part, the better to be able to jibe them

with the seemingly irreconcilable policies of the present.

Take, for instance, my present policy of enforcing the provisions of the civil service law and rules, regardless of who gets hurt. The squeamish will say it is not good human relations to boot out erring government employees from office at the first opportunity that comes along or to slash their pay to conform with the law. When I dismiss or demote employees, some people start questioning my motives and asking: Where does the philosophy of live and let live come in?

I admit that what I have been doing may not be kind to those affected but neither is it kinder to allow misfits and undesirables to wreck the entire civil service to which you and I belong. It is a part of our work that in looking after the best interests of the majority we have to displease a few. It is in the process of cleaning up, of instituting changes for the better, that some government employees who clutter the way may have to go.

The government employee must possess the capacity to be objective and broad-minded because it is the need of the moment. We all want a civil service that is healthy. I have been trying to do just that, live down an impression that the civil service is ill-ridden and anemic, like a weak tree that bends wherever the political winds blow. If I have gone all-out in my fight for the merit system, it is not because of any sadistic intent, but to shock the civil service out of its smugness and to help build a better image of the service in the eyes of the people.

Right now, I have embarked on a campaign to professionalize the police service, being fully aware of flagrant violations of the Civil Service Law and Rules in its ranks. To make this possible, corrective steps have to be taken on erroneous and illegal actions rendered in the past, particularly on the matter of appointments.

I have demoted police officers in rank and in pay for lack of legal requirements such as appropriate eligibility. Bold and drastic as this move may be, it is necessary under the circumstances to let the merit principle prevail in the police forces and to serve notice to all of what we aim to do.

If we relax on matters of illegal appointments and simply look the other way when such violations are discovered we will falter in attaining our objective. Misfits and political proteges will continue to have the choice picking of plum positions to the detriment of those who meet the law squarely and should be given preference.

To correct a wild accusation hurled at me from certain quarters, I have not confined the corrective drive on illegal appointments exclusively in the Manila police department and neither have I waged a one-man war against the city mayor of Manila. The same policy which I have followed for the MPD has been carried on consistently with police departments of other chartered cities. And after the cities, we shall go next to the police forces of the different municipalities.

Early this week, I sent out telegrams to mayors of all chartered cities, seeking their cooperation in the current re-examination of police records in all city police departments by furnishing us with the facts we need. For the purpose, I have commanded the special inspection and audit team of the CSC to step-up the review of the appointment papers of all policemen to find out non-eligibles.

All this has to be done in the space of one month because on June 15 and July 20, we have scheduled examinations for different police and detective positions to enable those who will be adversely affected by our findings to qualify for regular and permanent retention in their positions.

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# The Coordinating Factors in Forest Land Administration in the United States<sup>1</sup>

By

ANDREW W. BACDAYAN <sup>2</sup>

## INTRODUCTION

Over a third of the total land area of the United States is forested. This is one of the greatest single land uses, second only to agriculture. Federal forest policy aims to bring this timberland area into the permanent production of goods and services for the benefit of the American people. To make this possible, the country has adopted the tenets of multiple-use and sustained yield forestry. This is in recognition of three facts: (1) Forests do not only produce wood but also water, forage for domestic animals, wildlife and recreation. (2) The supply of forest land is static and with an exploding population and a rising income it must somehow be stretched to provide for the increasing demand for its products. (3) With proper care, the goods and services that these forest lands can produce could be maintained indefinitely.

The observer would logically conclude that to attain the goals of multiple-use and sustained yield forestry, there should be one

highly coordinated agency to implement the established policy. Reality, however, belies this logic. In the United States today, forest land administration is the function of many loosely affiliated and sometimes completely autonomous bodies scattered in the various federal agencies and in different levels of government.

In spite of this seemingly irrational setup which would seem to handicap the most effective administration of that country's vast forest resources, results after more than 60 years of forestry indicate that goals laid down by policy-makers have not been short of implementation (3). American forestry at present is not without problems. There is still a gap between what ought to be and what is. However, there is evidence which shows that the gap is gradually being narrowed. During the last six decades, tremendous progress has been made and this has been toward the direction in which American forest policy is oriented.

## ORGANIZATIONS WITH FORESTRY RESPONSIBILITIES

The principal organizations which give substance to forest land administration are found in the Departments of Agriculture, Interior and National Defense, the Tennessee Valley Authority and the state governments.

In the Department of Agriculture are the Forest Service, the Soil Conservation Service,

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<sup>1</sup>This is an abstracted version of an article originally written to fulfill the requirement of a course on Forest Land Management at the Department of Forestry, Michigan State University. Thanks are due Professor J. Hugo Kraemer, a SUNY Visiting Professor of Forestry at the U.P. College of Forestry, who went over this manuscript. Some statements are greatly improved as a result of his comments.

<sup>2</sup>The author is instructor in forestry policy and administration at the College of Forestry. He was NEC-AID grantee to the Michigan State University where he obtained his Master of Science on June 10, 1962.

the Extension Service, and the Agricultural Conservation Program.

The Forest Service occupies a vanguard point in American forest policy implementation. It administers more than 150 National Forests scattered in more than 40 states and Puerto Rico. These forests total to more than 181 million acres and comprise about 25 percent of the country's forest lands. To obtain the most out of this area, the Forest Service is involved in National Forest administration and management, and forest and range research.

Primary responsibility of the Soil Conservation Service is to help the farmers obtain the most out of their farms. It provides data about soils and their alternate uses. It gives practical recommendations as determined by the needs and capabilities of the land and the landowners' desires and decisions. Included in the recommendations are practices for the improvement and good management of farm woodlands.

The Extension Service is primarily an educational agency that diffuses information and influences action through the many inter-personal and mass media means of reaching the farmers. As such, its program includes forestry education and demonstration.

Encouragement of conservation practices on farms on a cost-sharing basis is provided by the Agricultural Conservation Program. Financial assistance is given for approved work by landowners to improve stands or to establish trees and shrubs for forest, windbarrier, and erosion control purposes.

In the Department of Interior, national forest policy is implemented principally by the Bureaus of Land Management and Indian Affairs and the National Park Service. The Bureau of Land Management is the custodian of the unreserved public domain. It is one of the Bureau's main responsibilities to see to it that these unappropriated lands are put into some form of land use. These uses may be grazing, recreation, mining, water regulation, fish and wildlife re-

fuges, forestry or a combination of more than one use.

The Bureau of Indian Affairs has a special division which administers for the Indians 16 million acres of forest land in reservations.

The National Park Service administers its substantial forest landholdings on the principle that these areas be preserved for the enjoyment of the American people. Though timber production is legally excluded from its functions, it implements forest policy through its main activity—recreation.

The Tennessee Valley Authority is a government corporation responsible for the production of electric power and development of the natural resources of the Tennessee River Watershed, more than half of which is forested.

The TVA has a Division of Forestry Relations whose responsibility is to improve the protective and productive capacity of the valley's lands and to achieve this end through state and locally supervised programs in forestry. Since the states covered by the Authority have forest services of their own, the work of the TVA Division of Forestry Relations is largely cooperative in nature.

Areas reserved for use by the Departments of the Navy, the Army, and the Atomic Energy Commission contain substantial amounts of forest land. To realize benefits from these otherwise idle lands, foresters are now employed to practice forestry in these agencies' reservations. In the Departments of the Army and Navy, forest land administration is lodged in the office of the Chief of Engineers and in the Natural Resources Management Branch of the Bureau of Yards and Docks, respectively.

In 1960, all the states except Arizona had a forestry bureau or a conservation department especially charged with forestry responsibilities. Early state activities were largely confined to public education and fire control. With federal cooperation, however, activities have tremendously expanded so that,



at present, activities include the management of state forests, forest taxation, acquisition of tax delinquent lands, provision of free technical aid to small farm woodlot owners, protection against damage from insects and diseases, regulation of private cutting practices and, in a few cases, the undertaking of research.

Another state organization which bears greatly on the implementation of the national forest policy is the state university or college. At present there are about 30 of such institutions offering courses in forestry. Though evaluation of standards of the education conducted at these institutions fall largely on the accrediting activities of the Society of American Foresters, main support comes from the states.

### GOALS AND ACCOMPLISHMENTS IN FORESTRY

L. H. Gulick laid down what he considers the broad yet specific objectives of American forest policy, namely, (a) the continuous production of a sufficient amount of wood of the desired quality and at reasonable prices to meet normal demand as well as emergencies and possibly exports, (b) the acquisition and maintenance of forests and trees for the protection and other services they provide, (c) to contribute to the economic stability and full employment status of the national economy and to add to human welfare and happiness, (d) to advance scientifically and technologically the growing of trees, the maintenance of forests and the utilization of forests so that it will be abreast with the advance in general knowledge and civilization, (e) to seek adequate timber supply to maintain national and regional security, and (f) to endeavor to convert the American people to a sense of responsibility in all land ownership, and particularly toward the development of sound long-range forestry habits (3).

With reference to these goals, he examined the status and activities then existing in forestry. Though many forestry problems re-

main unsolved, he came out with the conclusion that the goals were not short of attainment. The study may have been made in 1951 but his conclusions still hold true, and, as a matter of fact, are much more valid for the present.

### THE COORDINATING FACTORS

In spite of the multiplicity of governmental agencies in forest land administration, considerable progress has been and is still being made toward full forest policy implementation. While the arrangement presents a fertile ground for chaos and discord, the outcome has been one of relative order and substantial achievement.

There are four probable explanations for this situation:

*First*, the professional recruitment and education of personnel. The staff of the different forestry agencies are mostly foresters. Because of the nature of recruitment into the profession, they are well-selected and do not have illusions of what is expected of them as foresters. The prospective forester already knows that hard work lies ahead and that he does not expect his job to be financially remunerative. He does know, however, that he loves the kind of work he will be doing, is attracted to it, and is, therefore selecting himself into it (4).

This attitude is, of course, the result of a unique type of recruitment that foresters employ. This direct and forthright recruiting consists of inducing men into the profession not only by telling them of the attractions of forestry as a career but also warning them of its hardships. Thus, recruitment is the first step in the development in the profession of an attitude which we shall later see as a big factor in the orderly administration of forest lands under its care.

In college, the prospective forester goes through a curriculum that is developed according to standards set by the Society of American Foresters, Committee for the Advancement of Forestry Education. The

standards of the Committee apply to all forestry schools in the country. In this, we see a somewhat uniform kind of training which ultimately results in a rather uniform way of viewing problems.

Once in the field, the forester goes through an experience which binds him more closely to his fellow foresters. Camping out in the woods, working under similar and often times adverse circumstances, and working for a common cause—usually expressed by the value slogan, “the greatest good for the greatest number for the longest time”—foresters develop a strong bond of kinship. All foresters do not have a face-to-face relationship and do not experience the same things in the same place at the same time, but their knowledge that this is a common characteristic of their profession brings them closer.

The result of this recruitment which leads to self-selection, the uniform professional training, and the kinship gained from working in similar situations is a high degree of cooperation and sympathy for each other (4).

As pointed out by political scientist L. H. Gulick:

“This fact gives the clue to the major coordinating force in American forest policy and program. That force is not found in strong executive leadership by the President, or by the secretaries of the departments involved, or in the cabinet, or in Congress and its diverse committees, or in similar state structures. It is found rather (a) in the woods, and (b) in the forestry profession and its unified philosophy. In other words, the work itself, the land and the trees, tend to pull things together out in the field where most of the work has to be done. And, second, there are a few major differences of opinion as to what has to be done, or how to do it, among men who have been trained in the same schools, brought up on the same philosophy, and are working for the same great purposes”.

*Second*, decentralization. Another factor which bears a coordinating influence to the forestry work is the decentralized structure

of the organizations involved. An outline of the major operations of these organizations will display a system for forestry administration which is decentralized both through the constitutional retention of legal powers by the states and the practice of localizing operating responsibilities to local units by the federal agencies.

The coordinating effect of this arrangement comes from the fact that much latitude is granted the local agencies to adapt to local conditions what would otherwise be rigid standards of operations set nationally. In this way, results and accomplishments are enhanced and consequently areas of conflict are narrowed if not totally eliminated.

*Third*, grants-in-aid. Through this device, the Federal government provides funds to the state governments for the conduct of certain activities under specified conditions. These conditions usually give the grantor considerable control over the expenditure of the funds by the grantee. The grant commonly continues from year to year but may be discontinued by the grantor at any time (2).

From this arrangement it could be seen that while the state has the right to deviate from established policy they are actually deterred from doing so because of the possibility that federal aid may be withdrawn. This should not give the impression that the states become completely subservient to the federal government because in the formulation of policies governing the joint-financing programs, the states are given enough representation and without their consent the program can not go through. The resulting product of this setup is a continuity of funds for state forestry programs that is acceptable to both state and federal standards.

*Fourth*, the multiplicity of agencies, *per sé*. In itself, the existence of many agencies tends toward accomplishment of the work. For instance, in the federal-state relationship, failure of one to meet its obligations would

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# Some Logging Aspects Observed and or Studied in the United States

By

ANGELO G. MORDENO

## INTRODUCTION

As provided for by an official program developed by the Agency for International Development, Washington, D.C. (AID, Wash., D.C.), the author spent the entire summer of 1962 with the U.S. Forest Service and wood-using industries in the five Western States of California, Oregon, Washington, Montana and Idaho. The major lumber companies visited were Simpson Logging Company and Arcata Redwood Lumber Company in California; Brooks-Scanlon Lumber Company and Harold Barclay Logging Company in Oregon; Weyerhaeuser Timber Corporation in Washington; Boise-Cascade Corporation, Potlatch Forests Inc., and Brown Tie and Lumber Company in Idaho. The main objectives of said program was to observe and study possible aspects of American forestry in the field to supplement the author's academic training at the Oregon State University, Corvallis, Oregon.

It was observed that topography and timber size in the areas visited especially the three Pacific Northwest States of California, Oregon and Washington are very similar to ours in the Philippines. With this in mind, the general logging processes and techniques observed are worth discussing in this paper.

## LOGGING PLANNING

The whole logging operation is dictated by the logging plan. The plan involves the determination and prescription of the right

logging method, location of landings and setting boundaries, sequence of cutting and the entire road system for the area in question. A brief discussion of the general procedure is as follows:

*Pre-planning Activity*—Before any planning can be started, reliable maps, timber data and other pertinent information on the area should be obtained from any available source. Such necessities include aerial photographs, topographic map, vegetative map, timber stand data and others. A good topographic map, preferably one with a scale of 1"=400' is considered ideal.

*Stratification of the area*—On the topographic map, the commercial forest areas are delineated by marking their boundaries with green ink. If more than one area is delineated, they may be numbered according to priority of operation.

*Location of landings*—The location of the best landings is dependent on the accuracy of the topographic map. They should be located on the map taking into consideration the slope requirement of the logging method, yarding distance and the direction of haul. All of the probable landings are marked with an (X).

*Location of setting boundaries*.—A pair of dividers is the handiest instrument for locating the boundaries of the final settings on the map. With the arms spread out according to the external yarding distance and with the landings as centers, the setting boun-

daries are marked temporarily with pencil after taking into account natural features such as ridges, canyons, streams and other obstacles that may shorten the yarding distance. The boundary may also extend beyond the external yarding distance at some points due to the allowable long corners. Some of these trial boundaries intersect with each other. Settings which are encroached by the others around them are, of course, eliminated. The final setting boundaries are then marked with colored ink. For example, orange and yellow colors may be used for the boundaries of High Lead and Tractor settings, respectively. The same colors may be used for landings. The X's are then replaced by circular and rectangular diagrams representing High Lead and Tractor landings, respectively. If the landings are also intended to be used as loading points, the conventional sign of the appropriate loading system is drawn inside the circles or rectangles, as the case may be.

*Location of road system*—If hauling is to be done by motor trucks, the whole area needs an adequate road system. As in the previous case, a pair of dividers is used for projecting the road network on the map. With the arms spread out according to the distance between contour lines for the desired grade, the road is located on the map by stepping up or down the pair of dividers from one contour line to another. Landings far from the mainline are usually reached by spur-lines. Those which are not economically accessible by road may be considered as cold decks for swinging by skylines. The mainlines and spurlines are numbered or identified by any known code to facilitate identification.

*Sequence of cutting*—Numbers are provided for each setting. After the sequence of cutting has been determined, the order by which the different settings are to be logged is simply indicated by numbers.

*Field Checking*—The paper plan just completed is not the final plan. Topographic de-

tails on the map may not be true representatives of the actual ground conditions. Rock outcroppings, "muskegs", and other undesirable features may not be discernible on aerial photos. Field checking is therefore necessary. The logging plan map is brought to the field where corrections and adjustments are made accordingly.

## ACTUAL LOGGING OPERATION

*Road engineering and construction*—Road surveys commonly used are Classes A, B, and C, depending on the road standard. The Class B survey is becoming more popular for the typical logging road project. The crew is usually composed of three or four men. The P-line is run with a staff head compass and steel chain. The elevation on each station (usually at 50-foot interval) along the line is obtained with a hand level and leveling rod. Then a cross-section is obtained on each station by getting the side slope per cent with the abney hand level from the centerline to the construction limits uphill and downhill. These side slopes are plotted on cross-section paper and form the basis for the determination of the L-line and earthwork yardage. A transparent template representing the cross-sectional view of the roadbed (taking into account the road width and side slope ratios) is adjusted up or down and left or right of the slope line to determine the amount of cutting and/or filling and the centerline of the L-line, respectively. Adjustments are made accordingly after analyzing the alignment, grade, sight distances and mass diagram of the L-line. The next step is the actual location of the L-line on the ground and slope staking.

Roads are located, designed and constructed for timber, fire protection, administration and recreation. Road standard and construction are carefully and closely defined and supervised by the U.S. Forest Service on the national forests. Soil and water values demand a minimum waste of dirt in the process of road construction.

Big bulldozers of the Caterpillar D-9 type are common in road construction projects. Hydraulic rippers are very efficient in road opening and in breaking or displacing rocks along the right-of-way. U-blades mounted on bulldozers are commonly used in side-slope cutting, removing stumps and in cutting through rock formations. In powder work, big pneumatic drills are found to be very effective.

Techniques and equipment observed are basically similar to those in the Philippines. The main differences include the strict role of government on road standard and construction; the extensive use of corrugated metal pipes and permanent concrete, steel or laminated wooden bridges; and the frequent and early turn-over of equipment.

*Falling and Bucking*—Falling and bucking constitute one of the highest-paying jobs and probably the most independent in the logging industry. The job, in most cases, is given to contractors, commonly known as “gypos” who work either singly or in pairs on a per MBF basis. “Gypos” have been known to have engaged in the same job for as long as thirty years. Production is usually way ahead of the yarding and these workers usually have the earliest quitting time. In fact, they make their own time as long as production is sufficient to keep the yarding busy.

Not a single cross-cut saw was seen in operation. The typical set of equipment carried by one worker includes one power saw, fuel supply, automatic measuring tape, falling and bucking wedges that are either wooden or light-weight but high-strength aluminum alloy, and a small double-bitted axe for breaking or removing the “cheese slice” from the undercut in big trees. An additional tool required for fire protection is the shovel.

*Yarding*—The yarding system is determined by a number of factors most important of which are the following: topography, silviculture and timber volume. Tractors with or

without arches or skidding pans were observed in the Western Pine region where the ground is relatively flat or slightly rolling, the timber volume per acre is low, trees are scattered and the silviculture is selective. Selective cutting is either individual tree selection or unit area control.

A technique was observed at the Potlatch Forests, Inc. operations in Boville, Idaho wherein two tractors were assigned to a single road. One was assigned to yard for a long distance while the other worked at one-half this distance. This set-up eliminated or minimized heavy traffic on the road and “long breaks” of the landing and loading crews. Turnapull yarders were also observed in the same company’s operation for yarding logs for a distance of about one mile along the main haul road. They picked up the logs yarded by tractors to the main road and swung them to a river landing at high speed up to 15 miles per hour. A yarding unit is composed of a rubber-wheeled tractor equipped with an arch. The two yarders observed are made by LeTorneau-Westinghouse and Wagner. As a general rule, they are used for log transport that are too short for motor trucks and too long for “cats”.

In the Douglas-fir region, terrain is rough, volume per acre is high and the silviculture is clear-cutting. Such conditions are ideal for cable systems. Most popular equipment is the portable spar used mostly for the conventional High Lead and the Skagit radio-controlled “Bullet”. Although yarding distance is shorter and a denser road system is required by the portable spar, the rig-up and “move-in” times are very much shorter resulting in a cheaper overall yarding cost. The longer road system required is an advantage for fire protection purposes. The extensive use of tree spars was observed at the Weyerhaeuser operations in Aberdeen, Washington. Other cable system observed but still in the experimental stage are the Swiss Wyssen, Skagit radio-controlled Sky-car and the Skagit radio-controlled “Bullet”. Idaho is the only place where the author

observed the extensive use of Jammer Skidders. A yarding unit is made up of an ordinary portable loader with either a straight or goose-neck boom. A slackpuller is installed below the fairleader at the top of the boom to help the main drum slacken enough line as fast as the tong travels when thrown towards the log. They are very convenient, efficient and well-adapted to yarding logs along the right-of-way with a skidding distance of 120-150 feet uphill and twice as much downhill.

The author had the rare opportunity to have for his major professor the head of the Helicopter Logging Group of the U.S. Forest Service and Oregon State University. He had the chance to enroll in a course, conduct a hypothetical study, attend a logging conference, see movies and slides, all about the new concept of logging by helicopters. Actual observation was prevented only by the postponement of the second logging trial scheduled last December 17-19, 1962 at Stratford, Connecticut.

Inasmuch as the cable systems and logging by helicopter are undoubtedly very new, a brief discussion of each is in order.

#### (1) *Skagit radio-controlled Skycar*

This system was observed in operation at the Cascade Head Experimental Forest in Oregon.

The yarding unit consisted of the following: a 1-3/4" skyline suspended from a raised spar tree at the landing to a tail tree at the end of the "run" which was about 5000 feet away; two intermediate supports or jacks; a 1-1/8" snubbing line supported by the snubbing donkey located uphill and the other end attached to the uphill end of the carriage or skycar; a 400-hp. snubbing donkey with a large winch drum powered by a diesel engine through a torque converter; a 250-ft., 7/8" logging line wound around the winch drum; chokers hooked onto the end of the logging line; and two Talkie Tooters.

The crew was composed of the donkey engineer who served as foreman, three choker

setters, one head choker setter who was also the signal man, and two unhookers at the landing equipped with another Talkie Tooter.

The carriage was pulled uphill where the logs were located. The head choker man signaled the donkey engineer to stop the carriage. By turning a knob on the dial of the Talkie Tooter, the carriage was "ordered" to drop the logging line, which could reach logs at a distance of about 200 feet from the main line. A strip of about 400 feet wide could therefore be logged. The carriage did the pulling and lifting of the log through signals from the signalman manipulating the Talkie Tooter. By using the same gadget, the head chokerman signaled the donkey engineer to release the snubbing line so that the carriage with the load travels to the landing by gravity. The signal man at the landing used a similar instrument to instruct the donkey engineer and the carriage to hold on the snubbing line and to release the logging line, respectively.

This system was well-adapted to logging rugged terrain. Road construction, soil erosion and logging damage were minimized. It could lift and move 35,000 pounds of load over a long distance.

Among its disadvantages are: high initial cost, high rig-up and transfer costs, requires highly-trained personnel and a large volume per setting.

#### (2) *Skagit radio-controlled "Bullet"*

This system is more popular than the Skycar. The units observed at the operations of the Weyerhaeuser Timber Corporation, Boise-Cascade Corporation and Brown Tie and Lumber Company are part of the companies' regular commercial logging programs. However, economic studies are still in progress. As a result of such studies, the author gathered that the cost of a complete unit went down from \$120,000 to \$90,000 as of 1962.

The yarding unit was made up of a heavy motor truck on which were mounted the

yarding engine, a portable spar, and drums for the skyline, snubbing line and guylines; a Skagit "Bullet" carriage provided with a diesel engine, a winch drum and an amplifier; and a Talkie Tooter. The unit owned by the Brown Tie and Lumber Company in McCall, Idaho had a loading goose-neck boom mounted on the same truck. The other companies used separate portable loading machines.

The crew may be composed of the yarding foreman, yarder operator, two chokermen, one signalman who is at the same time the head chokersetter, and two unhookers at the landing.

Unlike the Skycar, the "Bullet" is an uphill, single span yarding rig. The carriage travels on the 1-3/4" skyline. One end of the skyline is anchored to a stump or tail tree at the end of the "run" while the other end is passed through the mainline block on top of the portable spar and finally down to the mainline drum. The carriage is raised or lowered by slackening or tightening the skyline. The snubbing line passes through another block on the spar, enters the carriage and winds around the winch drum at least three times. A choker hook is attached to the free end making the snubbing line the logging line at the same time. The main use of the diesel engine inside the carriage is to help the main yarder pull logs situated as far as 130 feet away and to lift them up prior to their transport to the landing. The Talkie Tooter is intended to maintain direct communication with the yarding engine operator as well as to facilitate supervision of the choker setters. Orders or instructions can be transmitted directly by means of the amplifier inside the carriage and the Talkie Tooter. At the landing, the skyline is lowered so that the logs can be unhooked.

The ideal yarding distance is within the neighborhood of 1,000 feet. The widest strip that can be logged is about 300 feet.

### (3) *Swiss Wyssen System*

This new cable hauling system was observed in Blue River, Oregon last December, 1962. A demonstration was conducted for the U. S. Forest Service by a Swiss crew headed by Mr. Jacob Wyssen himself, the designer and inventor of the rig.

The W-10 rig used in said demonstration was composed of a 200-hp. yarder, 1-7/8" skyline, 7/8" hauling line, intermediate supports, a Wyssen carriage, chokers and two Talkie Tooters.

The crew was composed of the following: one foreman, one yarder operator, two chokermen, one signalman, and two unhookers at the landing.

Yarding was downhill over a total span of about 2,500 feet. The hauling line pulled logs located at a distance of 100 to 150 feet from the carriages. The maximum capacity of the W-10 was 10 tons.

The yarder operator through signals from the signalman was responsible for the movement of the carriage and the load. A braking device was provided inside the carriage which holds on the skyline at a turn of a knob on the dial of the Talkie Tooter being manipulated by the signalman. The lowering and raising of the snubbing line was done by the yarder situated uphill. The carriage remained on the same point on the skyline until the bell device (connecting the snubbing line and the chokers) got in contact with the bottom part of the carriage and became enclosed by the brake release compartment. This triggered the braking device to release its hold on the skyline. The carriage with the "turn" traveled to the landing by gravity. Another Talkie Tooter at the landing was used to instruct the yarder operator to stop the carriage and lower the hauling line with the load.

### (4) *Helicopter Logging*

Of all the new logging methods, not one can match the way the helicopter struck the

imagination of the logger. This is surely his contribution to Century 21.

The concept of "logging in space" is very new even in the United States. Opinions and reactions are still varied. Many people consider it as fiction or a dream. However, a few are of the firm belief that the "big bird" is coming very soon to revolutionize the logging industry. In fact, actual logging had been undertaken in the past. A major test was successfully made during the summer of 1962 at Stratford, Connecticut, using a Sikorsky S 58 helicopter. Subsequent tests are expected to follow very soon.

Inasmuch as the subject is very broad, only a brief discussion is hereunder provided:

Contrary to the belief and thinking of many people, 'copter logging does not mean the uprooting of the whole tree and transporting it to the mill with leaves and all. Falling and bucking are definitely not eliminated. Wood weight is one of the most critical factors that will affect the economic success of the system. The volume content of a "turn" is immaterial as long as its weight is still within the capacity of the machine with an allowance for safety. As a general rule, the weight of the turn or load should be 80 per cent of the maximum capacity of the helicopter. Log weight is a very complex matter. It varies with the geographic location, elevation, precipitation, temperature, soil moisture content and the relative position of the log on the standing tree. An extensive study had to be made by the group headed by Prof. John E. O'Leary<sup>1</sup> before actual experimental logging could be started.

For economic and safety reasons, helicopter logging is not recommended in selectively-cut areas (specifically, individual tree selection areas). The helicopter will have to hover over the trees for a longer time. The

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<sup>1</sup> Associate Professor of Forest Engineering, Oregon State University, and Head of the U.S. Forest Service-Oregon State U. Helicopter Study Group.

logging line needed to reach the logs will be longer. These are surely dangerous on the part of the machine and personnel. Much tension is exerted on the line and machine as the log is pulled over a longer vertical distance. In clear-cut areas, the helicopter can simply descend and pick up the pre-hooked log.

Cruising speed is not so significant in helicopter logging. There is a definite maximum safe speed limit prescribed for the type of helicopter being used when carrying external loads. In addition, the hauling distance is short that the helicopter may not even have the chance to travel on its maximum speed. It is only best to utilize the maximum safe speed because the output and the eventual economic success of the system depend a great deal on the number of trips per hour.

A water log storage, preferably a bay is to be sought. Movies of the latest test clearly showed almost complete damage of the log after releasing it from about 50 feet from the ground. On the other hand, the damage shall be very small, if not negligible, by releasing the log on water. The helicopter won't have to come down very low thereby making possible an earlier return trip to the woods. This is the main reason why Alaska is classified as the best place where logging by 'copter may be economically feasible. The logs inside the bag boom shall then be rafted and towed by tug boats to the pulp mill.

The logging cycle is made up of hook-up, vertical climb, acceleration, cruising, releasing of load, vertical climb, acceleration, cruising and deceleration. Using the Sikorsky S58 with a lifting capacity of 5,000 pounds as basis, the logging cycle time is about 176 seconds for an average external distance of one mile. The maximum airspeeds applied are 58 mph and 78 mph loaded and unloaded, respectively. These speeds are very much lower than the designed maximum speed of the plane.



If helicopter logging is to be successful, a "logging 'copter" is necessary. The specifications for such an aircraft are<sup>2</sup>: ability to handle heavy external loads, an automatic release mechanism in the cockpit, good visibility downward and under the plane, two turbine engines, low initial and maintenance costs, component parts for fast exchange, and strong frame. Two helicopter plants, the Boeing Vertol in Morton, Pennsylvania and Sikorsky in Stratford, Connecticut, have helicopters available for logging. The logging helicopter is definitely a part of their respective production programs. The Sikorsky S64 seems to meet the specifications previously mentioned. It is available for logging this year. This machine has a potential capacity of 24,000 pounds, equipped with twin turbine engines, maximum speed of 125 knots without load, total of 8100 hp., and a Flying Crane configuration. The price of a new machine, however, is very high—\$1.75 million. A few days before his departure from the United States, the author gathered that this price was reduced to a flat million U.S. dollars. The counterpart of the S64 (single rotor assembly); the Boeing Vertol 114 (cabin body type and tandem rotor assembly), may be available in about two years.

When is helicopter logging necessary? The method is only applicable and advisable when a particular area cannot be logged by any other means. Helicopter logging is definitely not intended to replace all the present conventional systems of logging. It can never compete, for example, with the High Lead on an area where High Lead logging is still possible.<sup>3</sup>

*Loading*—Portable loaders of the Skagit SJ-7 and Washington Trackloader types and similar cranes with straight or goose-neck booms monopolized the loading operation in the places visited. Loading tongs are most

<sup>2</sup> O'Leary, John E. Some Factors Affecting the Feasibility of Helicopter Logging in the Pacific Northwest and Alaska.

<sup>3</sup> Miller, C. and A. G. Mordeno. A Comparative Study of Helicopter Logging and High Lead Logging in Western Oregon.

common although grapples are preferred in loading high-quality logs for veneer and plywood. Hydraulic or pneumatic operated tongs, hydraulic operated outriggers and rubber tires are accessories to increase convenience, efficiency, stability and mobility in loading.

*Major log transportation.*—Major transportation of logs from the woods to the mill or market is almost completely done by the motor truck. There are a number of observations relating to the economics of hauling that amazed the author—the load requirement on the public highway, building of a separate logging road near and in the general direction of the highway to avoid the load limit, the use of motor truck in combination with railroad, and empty logging trucks going in both directions.

In rough country, hydro-tarders and exhaust brakes are used to slow logging trucks going down a long steep grade. Trucking is mostly done by contractors who have their own equipment to deliver the logs to the mill at a pre-arranged price per MBF.

Railroad transportation was observed only in two company operations—Weyerhaeuser in Washington and Potlatch Forests, Inc. in Idaho. Motor trucks fed the railroad at the log transfer point. Boise-Cascade Corporation in Idaho transported their logs to Emmett on commercial railroad. Brooks-Scanlon Lumber Company in Oregon recently replaced their railroad lines with motor truck roads.

Log driving was observed in Idaho only. The Potlatch Forests, Inc. hauled their logs to the riverside landing and bucked them into eight-footers. Accumulation of volume was kept up before the "driving" season started. When the water level went up, millions of board feet in logs floated down the river during the Big Drive. They were gathered and inventoried at the pulp mill down the river in Lewiston.

As a rule motor truck is most economical and suited to short hauls, water transporta-

tion to long hauls while railroad is intermediate.

*Unloading*—The typical unloading rig was designed to unload the whole load. Most common was the overhead electric traveling crane which was also used for stacking the logs or bringing them up the log deck. Weyerhaeuser Timber Company in Longview, Washington has a giant grapple to unload a whole railroad carload. Big unloading machines of the Wagner Lumberjack or Le-Torneau Pettibone types were observed in operation in three big companies visited—Weyerhaeuser, Potlatch Forests, Inc. and Boise-Cascade Corporation. Small companies made use of “parbuckling” by means of an A-frame with an unloading line that mechanically or electronically pushes the whole load to a log slide. An improvised unloading tractor was made by mounting a long pushing blade.

*Log storage*—The unloaded logs were first classified according to species or grade. Each group was then bunched or bundled with steel straps. Bundling has the following advantages: loss of sinkers is prevented or minimized, there is a saving in pond space, and movement of logs in the log pond is facilitated.

*Equipment repair and maintenance*—It was observed that lumber companies did not keep a big inventory of spare parts except in camps located very far from cities or big towns. A traveling machine shop was maintained made up of a pick-up or a small truck carrying necessary spare parts. Major repairs were almost completely left to the local dealer or manufacturer. This is one distinct advantage of the average American logging company over its Philippine coun-

terpart—its proximity to equipment manufacturers or dealers who assure a ready supply of spare parts.

*Communication*—Every lumber company has in its command the use of radios or walkie-talkies to assure continuous contact between management and workers. They are also necessary for fire protection purposes. Two-way radios and similar equipment are now considered standard equipment in the United States.

### GENERAL OBSERVATION

The value of wood in the United States is relatively high. The stumpage price of government timber keeps on going up. Labor and tax costs are probably the highest in the world. Soil, water, recreation and other values demand that logging should be conducted with utmost care. For economic reasons, therefore, lumber companies aim for high productivity and a high degree of utilization. As is natural in a free enterprise or free competition, these forces have resulted in the closing of many small companies or their being absorbed by bigger ones.

The logging industry has made great strides since the days of the Big Wheels up to our so-called Space Age. Development or advancement in machinery, technology and productive efficiency has been tremendous. New logging methods emerge now and then. Research has become an integral part of the industry. These are necessary in order to meet the ever-increasing demands of people for forest goods and services. The industry, therefore, has to be on the move constantly—for only those companies or firms that can attain the highest production of quality products at the least cost survive.

# Cooperative Silviculture Research in the Philippines

By

FLORENCIO P. MAURICIO<sup>1</sup>

*Silviculture* is to forestry as *agronomy* is to agriculture in that each deals with the necessary techniques on the renewal, establishment and development of crops on a given site: forest products in silviculture and agricultural crops in agronomy. The importance of silviculture in forestry may be similar to that of a post in a typical nipa hut: without one of the posts, the nipa hut lacks structural stability and would topple down given certain stresses resulting from abnormal conditions. In the broad field of forestry silviculture therefore should be given equal attention as, if not a little bit more than, the other branches if forestry is to sustain the industries dependent (for raw materials) upon it and keep up with those allied to it.

The present state of forestry seems to point out the simple truth that silviculture in Philippine forestry has been sadly neglected. There are, of course, several reasons for this. There must have been a wealth of silvicultural data but very few of these have been gathered from researches that were adequately designed, or very few were recorded or printed, organized, correlated and interpreted to con-

stitute simple workable techniques for the practising forester. Most of these silvicultural information might have been lost during, or otherwise had not been taken advantage of before, World War II. Thus, it now happens that our attempts to perpetuate our endemic species in our planting areas are more of the cautious exploratory nature rather than of the serious extensive activity that bespeaks the reliable scientific backing.

A realization of this condition brought about the cooperative silvicultural research projects between the College of Forestry of the University of the Philippines and the Bureau of Forestry with the cooperation of some lumber concerns. The College of Forestry has the technically trained researchers with some experience, the Bureau of Forestry has the forest and financial resources, and the lumber companies have the material support for these silvicultural researches. It may be noteworthy that the catalyst that immediately brought about the establishment of these cooperative silvicultural researches in 1957-1958 was the presence of Dr. C. Eugene Farnsworth (from the State University of New York College of Forestry at Syracuse University) in the College of Forestry as Visiting Professor of Silviculture and of Mr. Paul Zehngraff (from I.C.A. Washington)

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<sup>1</sup>The author is formerly a Timber Management Assistant to the District Forester of Basilan and is presently an Assistant Professor of Forest Management in the College of Forestry, University of the Philippines, College, Laguna.

in the Bureau of Forestry as ICA technical adviser to the Forestry Director. These two scientists agreed with Filipino foresters that a cooperative effort by the two above-mentioned government forestry agencies was desirable because:

1. The Bureau of Forestry needs basic silvicultural information on logged-over areas in order to support its program of forest conservation but was (in 1957-1958) handicapped by competent men to plan and maintain silvicultural researches;

2. Active participation by the College of Forestry in certain research projects in cooperation with the Bureau of Forestry will add greatly in stimulating new ideas and exchange of information, will likely bring about a clear understanding in mutual problems, and will insure that research findings will promptly be introduced into the courses taught at the College;

3. A cooperative project by the two major government forestry agencies would enable the two organizations to pool their resources towards a more intensive study of the logged-over areas and consequently may yield more significant results than when each work separately.

For the maintenance of these cooperative researches, then Dean Calixto Mabeza designated the undersigned to represent the College of Forestry and work closely with the Forest Research and Forest Management Divisions of the Bureau of Forestry.

As indicated in the working plan formulated by College and Bureau of Forestry silviculturists, the preliminary objectives of the cooperative silvicultural researches were:

1. To obtain further information on stand structure, stand density, species composition, and quality of growth in a residual stand following selective logging.

2. To obtain a basis for the selection of trees to be removed from the stand following selective logging in order to place the stand in condition for quality growth with due consideration to stand structure, stand density and species composition as influenced both by the logging and by the silvicultural treatments that may be applied. For this purpose, there shall be replications of plots according to random selection in order that estimates of the effect of variation in site, of stand conditions, and of treatments can be made.

3. To determine the interval of time which should elapse between selective logging and silvicultural treatment of the residual stand to obtain best results at reasonable cost. For this, two levels of treatment and one control should be provided.

There are three<sup>2</sup> of these cooperative silvicultural researches established in selectively logged areas and these are enumerated and described hereunder:

1. *The Basilan Project.*

Project No. BF-CF-Bs-IV-A-2.

Location: Basilan Island—highlead plots in So. Abong-abong, Maluso district; tractor plots in So. Kapatagan, Isabela district.

Cooperating licensees: Basilan Lumber Co. in the highlead plots; Western Mindanao Lumber Co., Inc. in the tractor plots.

Date established: highlead plots: December 19, 1957—March 3, 1958. Tractor plots: March 3—April 28, 1958.

Total number of Plots: 12 highlead plots or 3.00 hectares; 9 tractor plots or 2.25 hectares.

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<sup>2</sup> The 4th cooperative silvicultural project is the Benguet Pine Thinning Study, BF-CF-Bg-IV-A-5, in Baguio City established in 1959 to study the response of Benguet Pine to different degrees of thinning.

Management data, per hectare basis:

1. Residual Stand	Commercial	Non-Commercial	Total
a. Number of trees .....	156.30	229.00	385.30
b. Basal area in m. <sup>2</sup> .....	19.84	8.80	28.65
c. Volume in m. <sup>3</sup> .....	322.39	71.08	393.47

Sites: Highlead plots— Sitting S-439, S-176-S, S-175 of

BASLUM. Tractor plots—S-186 of WEMILCO.

S-439 : about 12 kms. S-77°-E of Mahayahay, Maluso.

S-176-S : about 10.2 kms. S-77°-E of Mahayahay, Maluso.

S-175 : about 10.5 kms. S-77°-E of Mahayahay, Maluso.

S-186 : about 5.8 kms. S-87°-E of Kapatagan, Isabela.

Cost of establishment:

	Salaries/Wages	Per diems	Trans- portation	Total
a. Supervision .....	₱	₱1033.00	₱261.07	₱1294.07
b. Labor .....	₱2248.00	——	——	2248.00
c. Supplies & materials .....	——	——	——	87.65
TOTAL .....				₱3629.72

2. *The Butuan (Agusan) Project.*

Project No.: BF-CF-Ag-IV-A-3.

Location: Agusan (Butuan City).

Highlead plots in So. Ibulan; tractor plots in So. Lingayao.

Cooperating licensee: Nasipit Lumber Company.

Date established: Highlead plots:

March 10-13, 1958; tractor plots:

May 21-26, 1958.

Total number of plots: 6 highlead plots or 1.50 hectares; 9 tractor plots or 2.25 hectares.

Management data, per hectare basis:

1. Residual Stand	Commercial	Non-Commercial	Total
a. Number of trees .....	241.00	404.00	645.00
b. Basal Area in m. <sup>2</sup> .....	31.18	11.00	42.18
c. Volume in m. <sup>3</sup> .....	——	——	——

Sites: Highlead plots: I-26, about 11.8 kms. S-46°-30'-W of junction of Tuñgao Creek and Agusan River.

Tractor plots: L-39-D, about 0.84 kms. S-79°45'-W of junction of Talav and Lahi Creeks.

Cost of establishment:

	<u>Salaries/Wages</u>	<u>Per diems</u>	<u>Trans- portation</u>	<u>Total</u>
a. Supervision				
1) College of Forestry ....	₱21.00	₱21.00	₱106.00	₱126.00
2) Bureau of Forestry .....	—	80.00	—	80.00
b. Labor .....	1496.00	—	—	1496.00
c. Supplies	—	—	—	—
T O T A L .....				₱1702.00

3. *The Del Gallego (Camarines Sur)*  
*Project:*

Cooperating Licensee: Heirs of Don Juan del Gallego, Inc.

Project No.: BF-CF-CS-IV-A-6.

Date established: May 19—August 31, 1959.

Location: Layaton, Del Gallego, Camarines Sur.

Total number of plots: 9 plots or 2.25 hectares.

Management data, per hectare basis:

1. Residual Stand	<u>Commercial</u>	<u>Non- Commercial</u>	<u>Total</u>
a. Number of trees .....	477.3	792.00	1269.30
b. Basal area in m. <sup>2</sup> .....	51.11	29.93	81.04
c. Volume in m. <sup>3</sup> .....	—	—	—

Sites: Setting S-7, about 8 kms. from the town of Del Gallego.

Cost of establishment:

	<u>Salaries/Wages</u>	<u>Per diems</u>	<u>Trans- portation</u>	<u>Total</u>
a. Supervision				
1) College of Forestry ...	₱ —	₱ 78.75	₱ 99.35	₱ 178.10
2) Bureau of Forestry ...	—	447.00	105.90	552.90
b. Labor				
1) College of Forestry ...	₱1388.00	—	61.60	1449.60
2) Bureau of Forestry ...	428.00	—	—	428.00
c. Supplies & materials .....	—	—	—	20.75
T O T A L .....				₱2629.35

These researches provided opportunity for intensive application and necessary modification of some provisions in the Manual of Procedure of the Bureau of For-

estry regarding sample plots in order to fit the conditions in the study areas. Several cases are hereby cited:

1. *Selection of study sites.* All settings logged by the cooperating licensee were studied as to number and volume of the original as well as the residual stand as indicated in the residual sampling check, timber marking and residual inventory records of the timber management station which has jurisdiction over the license area. The operations map of the license was examined as to the topography and location of these settings. Only those settings where number of trees and volume of residual stand, topography, etc. approximate the average of those of the total number of settings were considered as probable sites. These were later inspected and the number reduced to only a very few settings. The final study sites were selected from these few settings by random.

2. *The sample plots.* Square plots measuring 50 m. x 50 m. were used in these researches. These plots were distributed at a uniform distance of 145 meters (from center of plot) from and around the spar tree. They are therefore perpendicular to

the spar tree. At the average 200 meters cable radius used at that time, the plots were therefore established in places where the destruction to the residual stand by the haul line is the probable average as regards the entire setting. While establishing these plots the residual stand, intensity of damage, topography, and other conditions were observed and noted in the plot records. All plots in a setting which were not of the average conditions in that setting were discarded.

3. *The reproduction plots.* Inside each sample plot, ten 2 m. x 2 m. reproduction plots or quadrats were established. There were two rows of these quadrats within a sample plot, five quadrats in a row, the row of quadrats towards the spar tree. There was, therefore, a good representation of the natural regeneration throughout the sample plot.

4. *Criteria for classifying trees by quality.* A set of criteria for classifying each tree according to quality was formulated during the field work to fit the actual conditions of the trees at that time. These criteria are hereunder indicated:

<u>Tree Quality</u>	<u>Vigor</u>	<u>Form</u>	<u>Risk</u>	<u>Crown Damage</u>	<u>Trunk Damage</u>
Good	1 & 2	1 & 2	1	a	1
Fair	3	3	2	b	2
Poor	4	4	3	c & d	3 & 4

Description of criteria:

- VIGOR: 1. Excellent: Very healthy, vigorous and very dense crowned trees.  
 2. Good: Healthy, less vigorous and less dense crowned trees.  
 3. Fair: Of average health and sparse crowned trees.  
 4. Poor: Usually small trees with poorly developed crown, still alive, and possibly able to recover.

- FORM: 1—Crown symmetrical, bole straight, clear of limbs and knots throughout its length (cylindrical).  
 2—Crown more or less symmetrical, bole straight with more taper than No. 1, with one or two small branches or sound knots along its length.

- 3—Crown lopsided but satisfactory, bole crooked, with one or two small branches or sound knots along its length.
- 4—Crown diseased or cut, bole very crooked or useless; double leader.

- RISK:
- 1—Firmly rooted; undamaged.
  - 2—Firmly rooted; damage to roots, trunk or crown not serious and may recover.
  - 3—Heavy damage (natural defect and mechanical damage) to roots, trunk or crown; uprooted, and subject to definite deterioration and/or loss; culled timber.

CROWN DAMAGE:

- a—No damage in the crown.
- b—Slight damage: up to 1/3 of crown damaged.
- c—Medium damage: up to 1/2 of crown damaged.
- d—Heavy damage: up to 3/4 of crown damaged.

TRUNK DAMAGE:

- 1—No damage in the trunk or bark.
- 2—Slight damage: bark skinned lightly either at base or bole.
- 3—Heavy damage: bark stripped extensively or wood damaged either at base or bole.
- 4—Very heavy damage: trunk broken off or cut at base or bole.

5. *Individual tree record form.* This is the first silvicultural research in the Philippines where index cards are used to record the data and observations gathered on the trees; an individual tree has a separate index card from the other trees. The index card was so devised that the important data will be tabulated by re-measurement periods until the 60th year. A system of holes are punched at the edges to facilitate ready summary of data in the research whenever desirable. These index cards are now preserved in the College of Forestry.

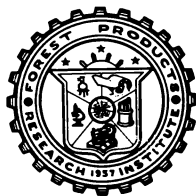
6. *Treatments.* To enable an intensive study of the development of the trees in the logged over areas as well as the response of several stands to silvicultural treatments as related to time, there were 3 levels of silvicultural treatment prescribed: control, timber stand improvement at the time of establishment, and delayed timber stand improvement. The plots were allocated to these silvicultural treat-

ments by random. The selection of the crop trees in the plots during the timber stand improvement process was substantial that followed in a tree thinning controlled, however, by the objective that peeler and veneer materials of both commercial and non-commercial species would be the probable major forest products in the second cutting cycle on these residual stands. Removal of the undesirable trees was by single hacking in case of trees up to 10 cms. in diameter, girdling in trees 10-30 cms. in diameter, and combination of girdling and poisoning with 2,4,5,T<sup>3</sup> in trees 30 cms. and over in diameter.

7. *Remeasurements.* Remeasurements will be every year for the first 3 years after establishment, on the 5th year, and every ten years thereafter. The remeasurement in the 2nd year will be a check on the original measurements. The remeasurement on  
(Continued on page 54)

<sup>3</sup> Concentration used was 4 lbs. acid equivalent per gallon diesel oil or 1 part, 2, 4, 5-T per 25 parts diesel oil.





## WHAT ONE SHOULD KNOW ABOUT LUMBER

When one buys lumber for a specific use, he is confronted with questions as to the species, size, and cost of the material that would serve best his purpose. If he has detailed specifications of the material he needs, he is partly relieved of this problem. All he has to do is check that the material delivered to him is in accordance with the specifications.

This is not, however, an easy job for the layman. He may know how to use a meter stick to see to it that the material he receives is of the desired size or dimension, but he may not know wood identification, much less lumber grading and other lumber terms which are important in determining whether the lumber delivered meets the specifications. Assistance, in this regard, may be obtained from local forest stations, forest district offices or from the Forest Products Research Institute in College, Laguna.

Generally, lumber dealers stock lumber in a wide variety of sizes, species, quality, grade, and other related characteristics. In the Philippines, the price of lumber usually depends upon the grouping of timber made by the Bureau of Forestry based on the economic importance of the species, its hardness and durability, and other physical characteristics that make it suitable for special kinds of wood products and with little regard to the actual grade of lumber. Thus, boards that may contain defects may be sold at the same price as high-quality lumber of the same species. Other factors that affect prices are size classifications such as "narrows" or "strips", "shorts", "extra wide" or "extra long" and the availability of the species in the market. Like other commodities, the price of lumber seems to follow the law of "supply and demand."

In the United States and other countries, the price of lumber is standardized according to species, uses, width, thickness, grade and other important features that affect the strength, durability and appearance of lumber.

### Measurement of lumber

The standard unit of lumber measurement is the board foot. Nominally, a board foot is the amount

of lumber equal in volume to a board 1 inch thick, 12 inches wide and 12 inches long. To determine the number of board feet in a piece of lumber, we multiply the thickness by the width, both in inches then, by the length in feet; the product is divided by 12, as follows:

$$\text{Board feet} = \frac{T \times W \times L}{12}$$

Where

T = the thickness, in inches

L = the length, in feet

W = the width, in inches

$$\frac{1 \times 4 \times 12}{12} = 4 \text{ board feet}$$

While lumber is generally sold by the board feet, it is also sold on the basis of surface measure, i.e., by square foot, when it is one-half inch in thickness. Some worked products, like moldings are sold by the lineal foot.

### Lumber classification

Lumber may be classified according to use, extent of manufacture, grade and so forth. According to its use, lumber is further classified into yard and structural.

*Yard lumber* refers to those which are commonly stocked in retail-lumber yards for use in general building construction. They are usually available in one or more species in a variety of thickness such as nominal 2 inches, nominal 1 inch, dressed 2 inches to a minimum of 60/32 inches. Sometimes thinner stock is offered in standard nominal widths of 4, 6, 8, 10 and 12 inches. Some boards falling under this classification contain knots, pitch and other features that detract much from the physical appearance of the wood. They are not desirable for purposes where appearance is important. However, some of them are suitable for general utility construction such as for sidings, wallings, floorings, shelving, panelling and other similar uses in medium-cost and low-cost homes.

*Structural lumber* includes those that are of heavy dimensions generally used for beams, stringers, joists, planks, posts, trusses, and other structural members to carry heavy loads. While defects affecting strength are common in yard lumber, they are not tolerated in structural lumber where strength is of primary importance.

According to the extent of manufacture, lumber is classified as follows:

**Rough lumber.**—Lumber that has not been dressed (surfaced) but which has been sawed, edged and trimmed at least to the extent of showing saw marks in the wood on the four longitudinal surfaces of each piece along its entire length.

**Dressed (surfaced) lumber.**—Lumber that has been surfaced smooth by a planing machine and more uniform in size than rough lumber. It may be planed on one side (S1S), two sides (S2S), and on all four sides (S4S).

**Worked lumber.**—Lumber which, in addition to being dressed, has been matched, shiplapped or patterned such as the following:

(a) **Matched lumber.**—Lumber that has been worked to a tongue on one edge or end of each piece, and a groove on the other edge or end to admit the tongue of a similar adjacent piece in a tight fit. This “tongue-and-groove” arrangement serves as the convenient integrating joint for the board elements in floors, walls, falsework, etc.

(b) **Shiplapped lumber.**—Lumber that has been worked or rabbeted on both edges of each piece to make a close-lapped joint when fitting two pieces together.

(c) **Patterned lumber.**—Lumber that has been shaped to a pattern or to a molded form in addition to being dressed, matched or shiplapped or any combination of these workings.

## Understanding lumber sizes

When one buys a “two by four” surfaced or planed lumber, he will find that its dimensions are likely to be somewhat less. The rough “two by four” may have been reduced by seasoning and surfacing operations but the nominal dimensions, through all the phases of lumber sales, still remain 2 by 4 inches. This is how lumber is bought and sold by *nominal* dimensions.

The allowance for standard dressed dimension is about 3/32 of an inch on one side of the board. Thus, 1-inch thick rough, seasoned lumber, when surfaced on two sides, will have a thickness of at least 13/16 inch to be acceptable.

## Grades of lumber

Lumber is graded to insure uniformity in dimensions and quality in the market, irrespective of the character and size of the trees from which it was sawn. The grading is based on the occurrence of defects and the location, position, form number and size of visible defects and blemishes.

There are two existing rules used in the Philippines in the classification of lumber: the “Grading Rules Governing the Inspection and Measurement

of Philippine Lumber” and the “National Hardwood Lumber Association (NHLA) grading rules.” The latter set of rules for grading is often used on lumber for export while the former which was promulgated for local use is seldom or never used in our country.

Although the government has urged our lumbermen to have their lumber graded so that the public may be able to buy lumber according to classifications, only a few practical grades are being actually used in the local market, namely: the merchantable grade and form-lumber or below-grade lumber. Merchantable grade corresponds to lumber sold in lumber yards for ordinary house construction, temporary construction, cabinet work, etc. Form-lumber or below-grade lumber are those pieces that do not come up to merchantable grade and which are usually used for scaffolding or forms in concrete constructions.

## Defects in lumber

The following natural defects of lumber affect its strength and hence its utility value:

A *knot* has loose and broken fibers and, if subjected to tension, becomes a source of weakness. This is also true in *split* or serious *check* which likewise weakens the resistance of timber. However, a sound knot on a post, stud or other members under compression, is not a serious defect.

The presence of *pinholes*, *shot-holes* or *grub-holes* on a beam has the same effect as *knots*.

Lumber that is *brashy* is objectionable. It is not only brittle but also weak. This defect can hardly be seen on the surface but can be easily detected at the ends of the lumber as a coarse portion distinct from the normal sound portion.

The presence of *sapwood* in lumber is not objectionable if treated with a wood preservative. Unless treated, it is safer not to use sapwood material at all because it is susceptible to decay and to the attack of wood-boring insects.

## Points to consider when ordering lumber

1. **Quantity**—Feet, board measure, number of pieces of definite thickness, width and length.

2. **Size**.—Width and thickness in inches—nominal and actual, if surfaced on faces; and length in feet—may be average length, odd lengths or uniform length.

3. **Species of wood**.—Yakal, tañgile, nato, bag-tikan, etc.

4. **Grade**.—As indicated by the grading rules adopted by the Bureau of Forestry, if lumber is for export; or as agreed upon between buyer and supplier, if lumber is for local use.

5. *Product.* — Flooring, siding, boards, etc.
6. *Seasoning conditions.* — Green, air-dried, or kiln-dried (moisture content should be specified).
7. *Extent of manufacture.* — Rough, dressed (S2S, S4S, etc.), tongue-and-groove, etc.

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#### FOUR FEATHERS

In the field of science, the institute has three feathers added to its golden cap of recognition. Dr. F. N. Tamolang was elected full member of the National Research Council of the Philippines on February 26, 1963. Two other members of the FPRI staff, Dr. Agustin Ramos, Jr. and Dr. Nona Calo, were elected members of the Society for the Advancement of Research on March 12, 1963. These three Ph.D. holders are members of the Sigma XI, an international society which is devoted to the promotion and advancement of science.

And foremost of all is Consultant Eugenio de la Cruz who was recently elected *Charter Member* of the ECAFE.

\* \* \*

BY

DR. BIENVENIDO GESMUNDO

#### FPRI DIRECTOR OFF TO AUSTRALIA

Director Manuel R. Monsalud left for Australia last February 26, 1963 under a Colombo Plan Travel grant. He will be away for six weeks to visit the Commonwealth, Scientific and Industrial Research Organization (CSIRO), forest products laboratories, pulp and paper mills, veneer and plywood plants, and other wood-processing industries.

#### TRAINING COORDINATOR BATS FOR AWARDS

Atty. Jesus Garilao, Government Training Coordinator, was the guest speaker in the opening of the current in-service training program of the FPRI. He spoke on "The Role of the Civil Service Commission as Coordinating Agency in Conducting the In-Service Training" and on "Career and Employee Development under Section 25, R.A. No. 2260".

The speaker stated that the development and maintenance of an employee's high-level performance is a primary concern of the Government. It should be the policy of the Government that a continuing program of employee training, supervisory, career, and executive development be established for all personnel at all levels under the leadership of the Civil Service Commission.

Particular stress was given to the necessity of each department, bureau, office or agency having an appropriate training staff and its own in-service training program, in accordance with the standards laid down by the Commission. Assistance may be secured from the Institute of Public Administration, the Budget Commission and other performance and technical organizations in connection with the promotion of government training programs. This will help insure the pooling of trained administrators on the senior and executive levels, and further improve the performance and competence of executives in the different branches and instrumentalities of the Republic of the Philippines.

Government In-Service Training Awards, as an incentive to the top management and agency training staffs, was also underscored. Under this program, three awards may be granted for: (a) the Most Outstanding Agency in In-Service Training, (b) the Most Outstanding Training Officer, and (c) the Best Resource Person.

#### SCIENTISTS VISIT FPRI

DR. THOMAS C. ALLEN, Professor and former Head of the Department of Entomology, University of Wisconsin, visited the Institute for two days, February 26 and 27, 1963, in the course of his travel to various oriental countries on a Wisconsin Graduate Research grant. During his stay at the Institute, he conducted, together with the Entomology Section staff, laboratory experiments on the behavior of the different species of termites in relation with wood-decaying fungi and also on the toxicity of insecticide-impregnated concrete to termites. His impressive illustrated lecture on the same subject was rendered at the FPRI Conference Room to a composite audience of FPRI personnel, students and faculty of the College of Agriculture and Forestry.

MR. ANDY STASHEVSKI, Forest Products Research Officer, CSIRO, Australia was also a recent visitor of the Institute. He observed the different research activities in veneer and plywood manufacture, pulp and papermaking, charcoal briquetting, glue formulations, wood anatomy, wood preservation, strength test procedures, and the wood carving and plywood industries in Paete and Pangil, Laguna. Mr. Stashevski also relished the good-

will and mutual relationship of FPRI personnel who had obtained their training at the Division of Forest Products, CSIRO Australia.

Both scientists were special guests of the FPRI.

### JOINT FPRI AND PMAMP SEMINARS HELD

Joint seminars were held by the Institute and the Plywood Manufacturers Association of the Philippines in the Philippine Columbian Club, Taft Avenue, Manila and Apo View Hotel, Davao City, last December, 1962 and January, 1963, respectively. FPRI technologists, headed by Mr. Dominador Faustino, Chief, Industrial Investigations Division were the resource speakers. Prof. Alfred Bishop, SUNY visiting professor to the College of Forestry, was the "live-wire" of these seminars. The main objective of the seminars was to develop effectively working knowledge and basic techniques in the processing and control of quality in plywood manufacture.

Participants who attended those seminars were supervisors, foremen and production superintendents of plywood and veneer plants from different places of the country. Obviously, these seminars would rebound to the improvement and sustained good quality of plywood, low cost of production, and ultimately, rational benefits to both manufacturers and end-users.

### FPRI EXHIBITS IN BATANGAS FAIR

The FPRI participated in the Southern Tagalog Commercial and Industrial Fair last January, 1963. Different kinds of forest products were on display for the benefit of the public. The bamboo-faced plywood tiles and the room divider made of sawali veneers were so impressive that orders for them mounted during the fair. The exhibits were laudably attractive and received unprecedented commendation from Director Eliseo Quirino of the Bureau of Commerce.

### FPRI SCHOLARSHIP AND SCHOLARS

The Institute, for this year, obtained two scholarships for its personnel namely: FAO fellowship in logging and sawmill engineering and FAO Andre Mayer Research Fellowship Award in wood technology. Mr. Maximo Sagrado, Chief, Sawmilling Section of the Industrial Investigations Division and Mrs. Emma Artuz-Philips, Chief, Fiber Characteristics Section of the Wood Technology Division were the recipients, respectively. Mr. Sagrado is now enrolled at the College of Forestry, University of Washington, Seattle, Washington while

Mrs. Phillips is pursuing her course at the Graduate School, Yale University. Both of them are doing fine in all respects.

Mr. Jose A. Semana, Forest Products Technologist, returned to the Philippines after completing one year of training on semi-chemical pulping in Stockholm, Sweden. Surprisingly his complexion was not affected by the heavy snow fall in that "snow-white country." He is a genuine Filipino and believes in "Filipino first" in research and all other activities.

### RESIGNATIONS AND DESIGNATIONS

Three resignations were inevitable at the Institute as a result of the struggle for "greener pastures." Mr. Primitivo Galinato, Chief, Wood Quality Evaluation Section of the Industrial Investigations Division is now Asst. Director, EEA in the Bureau of Forestry; Mr. Francisco Milan, Forest Products Technologist, Wood Treatment Section of the Wood Preservation Division is now the assistant of Mr. Galinato; and Mr. Ruben Garcia, Information Editor is now with the Information and Education Department of the College of Forestry, U.P.

Of course, all smiles from Mr. Exequiel Mendoza, now Chief, Wood Quality Evaluation Section, Industrial Investigations Division, Mr. Felino Sriban vice Mr. Milan, and Mrs. Josefina Gonzalez, now Chief, Chemical Composition Section of the Chemical Investigations Division, who got their well deserved promotions. More power to you lucky ones in your respective fields of research.

Ex-Director Eugenio de la Cruz, Director-Emeritus has been the lone consultant of the Institute without extra compensation since our two FAO consultants left us. *Salamat po at mabuhay po kayo.* Gene.

### AD INTERIM

The position of Information Editor, for some time now, has been a "football" affair. Because of the low-salary classification by WAPCO, it is obvious that, although some take a bite, there are no good takers. Dr. Gesmundo, our Training Officer, however, seems to be the exception and, because he is the only taker, let us salute him for this thankless job. He is now Acting Information Officer without extra compensation.

With the international travels of Director Mon-salud to Europe and Australia for about 4½ months, Dr. F. N. Tamolang, Asst. Director, has been ably holding the reins of the Institute. At least, nobody is "rocking the boat." Everybody

(Continued on page 44)

# FPRI Technical Notes

## THE EFFECT OF MOISTURE CONTENT ON THE STRENGTH OF WOOD

The different strength properties of wood have been defined and their importance in the selection of species for certain uses was discussed in FPRI Technical Note No. 32. Strength properties of wood are affected by various factors of which *moisture content* is probably the most important.

Moisture content is defined as the weight of the water contained in the wood expressed as a percentage of the weight of the oven-dry material. There are two common methods of determining moisture content, namely: by oven-drying and by the use of electrical or electronic devices. The former method is probably the most accurate but it is a long process and requires the cutting of the wood into small specimens for faster drying. The latter method is rapid and no cutting of the wood is required. The oven-drying method, however, is the one accepted for determining the moisture content of tested wood.

If there is a uniform distribution of moisture in a piece of unseasoned wood, there is practically no change in its strength properties until the moisture content reaches a certain level referred to as "fiber-saturation point" which is about 30 percent. As the moisture content decreases below this point there is a general increase in the strength properties, except toughness or impact strength which, in some species either shows general increase, i.e., decrease at first then increase when the moisture content falls below 12 percent, or continuous decrease.

The strength properties of wood are not affected uniformly by drying. Some increase more rapidly than the others. Strengths in bending, compression, and shear parallel to grain, for example, increase considerably with decreasing moisture content; the average increase ranges from 3 to 6 percent in 1 percent change in moisture content, hence, at 12 percent moisture content, the modulus of rupture, compressive strength and shear parallel to grain of a defect-free piece of wood may be 75-100 percent higher than the corresponding values for green material. The modulus of elasticity is less affected by drying. The average effect is 2 percent per 1 percent change in moisture content, thus, the modulus of elasticity of wood at 12 percent moisture content ranges usually from 20 to 30 percent higher than the corresponding value when the wood is green.

When comparing the strength properties of different species or individual pieces of wood, it is important that the strength values are given the same level of moisture content.

The moisture content of seasoned wood varies relatively among individual pieces. Hence, in the testing for mechanical properties of air-dry material, the test values are adjusted to a uniform moisture content of 12 percent to facilitate comparison among species in accordance with international standard procedures. The adjustment may be made by means of either the percentage correction factors which are similar to those prepared by Markwardt and Wilson or the U. S. Forest Products Laboratory exponential formula which is considered nearly accurate and satisfactory. The relevant formula is as follows:

$$\text{Log } S_{12} = \text{Log } S_g + \left\{ \frac{M_p - M_{12}}{M_p - M_d} \right\} \text{Log } \frac{S_g}{S_d}$$

where:  $S_{12}$  is the strength at 12 percent moisture content  $M_{12}$ ;

$S_d$  and  $M_d$  are the strength and moisture content, respectively, of the air-dry material obtained from test;

$S_g$  is the strength of the green material;

$M_p$  is the moisture content at the species intersection point.

The value of the "intersection point" ( $M_g$ ) is determined experimentally for each species. However, in the absence of experimentally determined value for any species, 25 percent may be assumed. The exponential formula is not applicable if the moisture in the wood is not uniformly distributed. Although the exponential formula is applicable theoretically from zero moisture content to the intersection point, it is evident that, in all cases, the risk of error incurred becomes less when the moisture content of a piece in question is closer to that moisture level to which adjustment is desired. For this reason, air-dry specimens are seasoned to or as close as possible to 12 percent moisture content before testing.

Since large sizes of wood require a long period of time to dry, it has become the general practice to use green or partly dried timber in construction, although the use of fully dried timber should be preferred. Drying starts from the surfaces of the

wood and progresses inward to the core. The moisture content of fibers in the core, therefore, the fibers on the outer part of the wood gain strength more rapidly than the fibers in the core. The result is an evident change in the strength properties with change in moisture content, even is still above the moisture content of the material is still above the fiber-saturation point. This differential drying (moisture gradient) between the fibers of the outer and inner parts of the wood sets up internal stresses, resulting in the formation of checks and splits on the surface of the wood, the weakening effect of which may offset the expected increase in strength due to drying. Because of this weakening effect and the difficulty of estimating the extent and rate of drying under unrestricted conditions, which is the usual case in structure, the calculation of the working stresses is based on the strength of green or unseasoned timber.

Since timber is subject to varying moisture conditions in use, they are, for purpose of design consideration, classified into: First, timber that is green or unseasoned, or timber that is kept wet all the time by being submerged in water; and second, timber that is dry (at equilibrium moisture content) when fabricated and kept dry in service. In the first case, the working stresses, are applicable; in the second case, the working stresses may be increased slightly depending on the size, grade and the type of the structural member.

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### RELATIVE DURABILITY OF SOME PHILIPPINE WOODS WHEN EXPOSED UNDER CONDITIONS THAT FAVOR DECAY AND TERMITE ATTACK

The extent or degree with which wood, without any preservative treatment, can resist decay and other forms of wood deterioration is called its natural durability. This property of wood is highly variable and depends on many factors such as the species of wood, the species of attacking agencies, the nature or type of service conditions, and climatic conditions, to mention a few.

To a great extent, the species of wood influences the natural durability of wood. There are wood species which are either resistant or susceptible to decay or other forms of deterioration. Thus, molave (*Vitex parviflora* Juss.), for instance, is a typical species whose heartwood is well-known for high natural durability and is often recommended for use under severe service conditions. On the other hand, tañgile [*Shorea polysperma* (Blanco) Merr.] has lesser natural durability than molave and, for this reason, it may not be used satisfactorily under severe service conditions.

Also influencing the natural durability of wood is the species of attacking agencies such as termites. There are insect wood destroyers which have preferences as to the kind of wood the tree has. Different parts of the same tree have varying degrees of natural durability. Thus, as a general rule, the heartwood portion of a tree is more durable than the sapwood. This is attributed primarily to certain chemical changes that take place in the formation of the heartwood. The use of the sapwood portion of timber should be avoided if long life is desired of an untreated wood. It must be borne in mind, however, that the sapwood portion of most species can be more satisfactorily treated with preservatives than the heartwood. Consequently, if wood is to be treated effectively with preservatives, it must contain sapwood. If properly treated, sapwood may last as long as, if not longer than, the heartwood of a tree.

There are species of wood whose sapwood and heartwood have similar color. These are the exceptions rather than the rule. There is no clear-cut demarcation in their colors so that, at times, it is difficult to distinguish the sapwood from the heartwood. Both the heartwood and the sapwood of these tree species have low decay resistance.

(Continued on page 37)

Table 1. Relative durability classification of some commercial  
Philippine wood species<sup>1</sup>  
(Without preservative treatment)

Official common name	Unit weight (air-dry: 15 to 17% M.C.)	Scientific name <sup>2</sup>
(lbs. per cu. ft.)		
<i>Very durable — Life over 9 years</i>		
Akle	47	<i>Serialbizia acle</i> (Blanco) Kosterm.
Akleng-parang	44	<i>Albizia procera</i> (Roxb.) Benth.
Bansalagin	61	<i>Mimusops parvifolia</i> R. Br.
Betis	52	<i>Madhuca betis</i> (Blanco) Macbr. & Merr.
Duñgon	59	<i>Tarrietia sylvatica</i> (Vid.) Merr.
Ebony (Philippine)	—	<i>Diospyros ferrea</i> (Willd.) Bakh.
Ipil	55	<i>Intsia bijuga</i> (Colebr.) O. Ktze.
Kamagong	68	<i>Diospyros philippensis</i> (Desr.) Gurke
Malabayabas	76	<i>Tristania decorticata</i> Merr.
Molave	59	<i>Vitex praviflora</i> Juss.
Narig	61	<i>Vatica mangachapoi</i> Blanco
Narra	44	<i>Pterocarpus indicus</i> Willd.
Sasalit	77	<i>Teijsmanniodendron ahernianum</i> (Merr.) Bakh.
Tindalo	54	<i>Azelia rhomboidea</i> (Blanco) Vid.
Yakal	58	<i>Shorea astylosa</i> Foxw.
<i>Durable — Life from 4 to 9 years</i>		
Antipolo	35	<i>Artocarpus blancoi</i> (Elm.) Merr.
Batino	48	<i>Alstonia macrophylla</i> Wall.
Bolong-eta	—	<i>Diospyros pilosanthera</i> Blanco
Makaasim	53	<i>Syzygium nitidum</i> Benth.
Manggachapui	45	<i>Hopea acuminata</i> Merr.
Supa	51	<i>Sindora supa</i> Merr.

<sup>1</sup> The different species are not listed in their order of natural durability.

<sup>2</sup> Salvosa, F.M. 1960. A forestry lexicon of Philippine trees. Preliminary copy, Forest Products Research Institute, College, Laguna. (Unpublished).

Official common name	Unit weight (air-dry: 15 to 17% M.C.)	Scientific name <sup>2</sup>
(lbs. per cu. ft.)		
<i>Moderately durable — Life from 2 to 4 years</i>		
Amugis	50	<i>Koordersiodendron pinnatum</i> (Blanco) Merr.
Bagtikan	40	<i>Parashorea plicata</i> Brandis
Bitanghol	36	<i>Calophyllum blancoi</i> Pl. & Tr.
Bitao (palomaria)	48	<i>Calophyllum inophyllum</i> L.
Dao	46	<i>Dracontomelon dao</i> (Blanco) Merr. & Rolfe
Guijo	53	<i>Shorea guiso</i> (Blanco) Blume
Kalantas	27	<i>Toona calantas</i> Merr. & Rolfe
Lanutan, Vidal	37	<i>Bombycidendron vidalianum</i> (Naves) Merr. & Rolfe
Lauan, red	38	<i>Shorea negrosensis</i> Foxw.
Lumbayau	41	<i>Tarrietia javanica</i> Blume
Palosapis	40	<i>Anisoptera thurifera</i> (Blanco) Blume
Raintree (acacia)	35	<i>Samanea saman</i> (Jacq.) Merr.
Tañgile	36	<i>Shorea polysperma</i> (Blanco) Merr.
<i>Perishable — Life from 1 to 2 years</i>		
Almaciga	36	<i>Agathis philippinensis</i> Warb.
Apitong	48	<i>Dipterocarpus grandiflorus</i> Blanco
Bayok	42	<i>Pterospermum diversifolium</i> Blume
Hagakhak	39.9 <sup>3</sup>	<i>Dipterocarpus warburgii</i> Brandis
Kalumpit	39	<i>Terminalia microcarpa</i> Decne.
Lanete	39	<i>Wrightia laniti</i> (Blanco) Merr.
Lauan, white	35	<i>Pentacme contorta</i> (Vid.) Merr. & Rolfe
Malaanonang	—	<i>Shorea polita</i> Vid.
Ma'abuñga	31	<i>Alseodaphne malabonga</i> (Blanco) Kosterm.
Marango	36	<i>Azadirachta excelsa</i> (Jack) Jacobs
Mayapis	31	<i>Shorea squamata</i> (Turcz.) Dyer
Nato	40	<i>Palaquium luzoniense</i> (F.-Vill.) Vid.
Palak-palak	—	<i>Palaquium lanceolatum</i> Blanco
Panau	48.8	<i>Dipterocarpus gracilis</i> Blume

<sup>3</sup> Data obtained from F.P.R.I. findings based on 12 per cent M.C.



# Moving-Up Day Scene

*"In the development of the wood industries, the problems really lie in forest management, utilization and law enforcement . . . the solution of the problems met in these areas will lead to forest conservation, greater employing capacity of forest industries, and bigger income for people in the industries," stressed Secretary Brigido Valencia.*



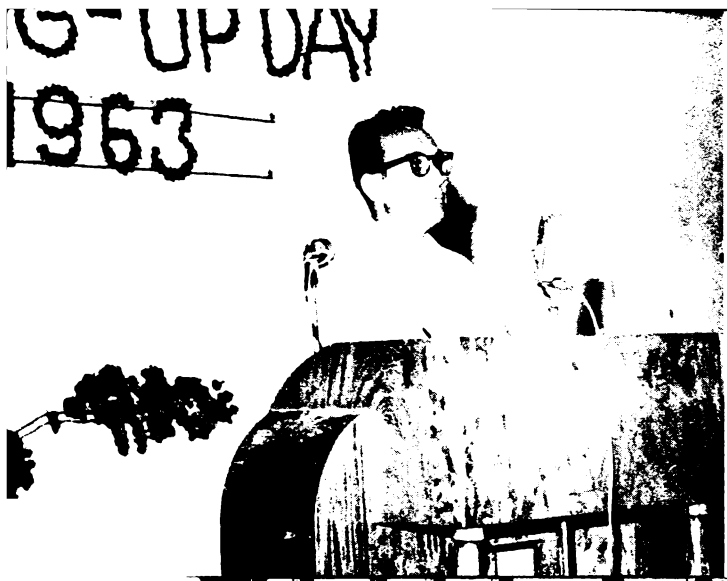
MOVING-UP DAY  
1953



*Dean Gregorio Zamuco welcomes the M. U. Day guests.*



# G-UP DAY 1963



*U.P. Vice-Pres. D. Umali, introduces the Hon. Brigido Valencia, M. U. Day (1963) guest of honor.*



*M. U. Day Audience sings the "Pambansang Awit ng Pilipinas".*

*Miss Fe Allazas, soprano, and Miss Edna Orfino, accompanist, of the U.P. Conservatory of Music thrill the audience with musical numbers.*





*Dean Gregorio Zamuco and Forester C. Sulit, C. F. Alumni Association pres., congratulate the Hon. Brigido R. Valencia on his speech.*



*Romulo C. Casilla, cum laude, receives the Ahern Medal from Forester Sulit, U.P. Forestry Alumni Assn. president.*



# Here & There

## WELCOME

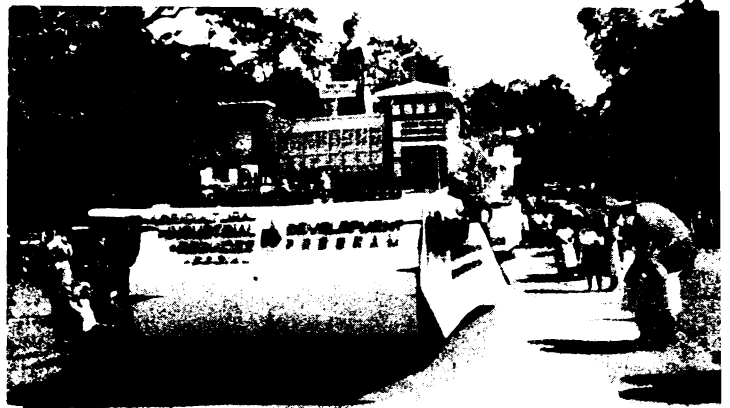
DELEGATES FIRST REGIONAL  
FORESTRY CONFERENCE  
DAVAO CITY FEB. 5, 1963



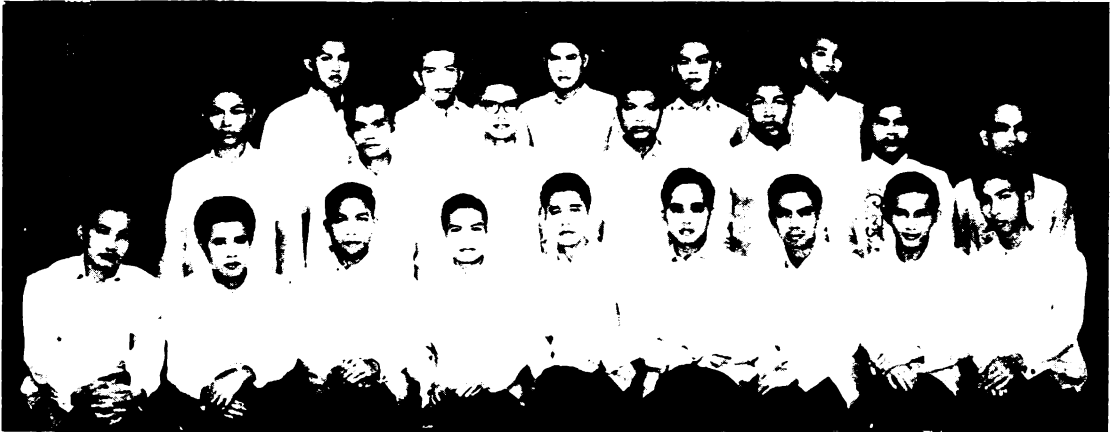
Director Pecson speaking before the delegates at the Davao Forestry Conference, assisted by Foresters Martin Reyes, Segundo Fernandez, Severino U. Nablo and Jorge Miranda.



U.P. Vice-President E. Virata congratulates Agustin Pascua Jr., one of the Ranger graduates (1963) as Prof. C. Recto, College Secretary looks on.



The College of Forestry first prize-winning float at the 1962 Loyalty Day at Los Baños.



Zeta Beta Rho Fraternity Resident Fellows—1962-63

First Row l to r. M. Macumbal, O. Suguitan, J. Perez, R. Casilla, A. Ishmael, (Supreme Fellow), J. D. Lamanillo, Fellow Jr. Adviser, A. Mendoza, E. Quintana, V. Fernandez.  
2nd. Row. L. Suaverdez, A. Glori, H. Sambajon, V. Dotimas, H. Clemente, A. Picardo, G. Esber.  
3rd Row. A. Principe, G. Petilos, A. Federizo, O. Gendrano and R. Ecang.  
Not pictured. A. Blando, D. Borja, A. Duldulao, W. Dy, M. Dalmacio, B. Gendrano, R. Fernandez.

*Very perishable — Less than 1 year*

Balakat	38	<i>Ziziphus talanai</i> (Blanco) Merr.
Balete	31	<i>Ficus balete</i> Merr.
Baniti	—	<i>Diploknema ramiflora</i> (Merr.) H. J. Lam
Kalunti	35	<i>Shorea kalunti</i> Merr.
Manggasinoro	30	<i>Shorea philippinensis</i> Brandis
Nato, white	36	<i>Pouteria macrantha</i> (Merr.) Baehni
Pahunan	51	<i>Mangifera altissima</i> Blanco
Pine, Benguet (saleng)	37	<i>Pinus insularis</i> Endl.
Taluto	26	<i>Pterocymbium tinctorium</i> (Blanco) Merr.

**RELATIVE DURABILITY . . . .**

(Continued from page 34)

Another factor that influences the natural durability of wood is density. Heavier or denser wood has higher natural durability than lighter or less dense wood. Among woods of a given species, exposed under similar conditions and subjected to attack by the same species of fungus or insect, the denser wood is expected to outlast the less dense one when it comes to durability. Inasmuch as density is only one of the many factors that affect the durability of wood, it is not a reliable basis for testing wood durability. In Table 1, for instance, it is significant to note that some light woods have longer durability than some woods of dense species. This may be due to differences in the chemical extractive contents of different woods.

The durability of wood is also dependent upon the severity of service performance or condition to which it is subjected. Thus, even pieces of wood, cut from the same tree, may react differently when they are exposed under varying service conditions.

The importance of the knowledge of the natural durability of wood cannot be overemphasized. It is of immeasurable value in determining the maximum utilization of woods.

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## ALMACIGA RESIN

*Manila copal* is the trade name of almaciga resin. It is produced principally in the Philippines, Borneo, Celebes, Moluccas, and New Guinea. In the Philippines, this resin is called *Philippine Manila copal*, irrespective of its source.

Manila copal is produced from the resin that is exuded by the almaciga tree (*Agathis philippinensis* Warb. or *Agathis alba* Lam.) of the family Araucariaceae. It may be obtained in solid or semi-solid form, generally yellowish in color to white when pure. It is soluble in alcohol, benzene, and ether but not in water.

Manila copal has a variety of important uses. It is used in the manufacture of high-grade glossy varnishes and lacquers. Paint manufacturers also use copal to give color brilliance to traffic lines on highways. Locally it is used as incense in religious ceremonies, as smudge for mosquitoes, for torches, starting fire, making patent leather and sealing wax, the manufacture of cheap soaps, shoe polish and floor wax, for photogravure, paper sizing, shellac substitute and other related uses. It is exported to Europe and the United States where it commands a good price.

Almaciga resin is of two kinds: the *ground* or *fossil resin* and the *surface* or *tapped resin*. The ground or fossil resin is obtained by digging into the ground where an almaciga tree once stood. It is an old, hard, and amber-colored exudation from the roots. Surface resin is obtained by tapping<sup>1</sup> the living almaciga tree. The tapped resin as exuded by the tree is soft, but when allowed to flow freely, it assumes the shape of tear drops or icicles and becomes hard after a month or so. As it ages it becomes amber-colored like the fossil resin.

Between the two methods, the easier way to produce Manila copal is by tapping. There is no definite information whether the resin yield of almaciga is greater during a particular season of the year. However, for convenience, it is advisable to gather resin during the summer season. During rainy days the trails are muddy and slippery, making it difficult to transport the collected resin. Some resins are not necessarily clean when collected. But the Forest Products Research Institute has recently found a method of cleaning them to improve their quality.

*The right tree to be tapped.*—Not all almaciga trees exude the same quantity of resin. But an important criterion in the selection of the tree to be tapped is its size. The ideal trees for tapping are about 40 centimeters in diameter or over. The tapping of small trees, 20 centimeters or less in diameter, should

be avoided for it violates a forestry regulation and is punishable.

*Tapping practices.*—The simplest and most economical tool used for tapping is a sharp and broad-bladed bolo or big knife. A mallet may be used for hammering the bolo to control the depth of the cut in order to avoid cutting or destroying the cambium.<sup>2</sup> Experienced collectors, however, do not make use of mallets. They can readily swing their bolos with a force just enough to cut the desired depth.

Hacks used in the United States in turpentine tapping may also be used to advantage in regulating the depth of the chipping. This tool is suitable for slant tapping, but for horizontal tapping, the bolo is preferred.

The initial tapping should be made on the basal portion of the trunk<sup>3</sup> not more than 30 centimeters from the ground. (See diagram on page 5). The standard tapping cut on the bark is usually one or two centimeters along the height of the tree and 30 centimeters along the circumference. As many tapping cuts as possible around the circumference of the tree may be made, but it should be remembered that the distance between cuts along the circumference should be at least 60 centimeters or twice the length of the tapping cut. This is very important because the health or life of the tree may be impaired if not enough bark is left intact. Consequently, the flow and amount of resin exuded will be adversely affected.

The tapper should not make the cut so deep as to injure the cambium. This practice violates a Bureau of Forestry regulation and is illegal. The resin of almaciga is exuded by the bark, not by the wood, so that cutting beyond the bark does no good. It only injures the tree.

A week after the tapping is made, the resin that has flowed hardens and plugs the resin ducts. Therefore, it is necessary to collect the resin and make a

---

<sup>1</sup> A method of extracting sap or resin from the tree.

<sup>2</sup> It is the growing tissue lying between the wood and the bark, the function of which is to increase the diameter of the stem and to heal wounds of the living tree.

<sup>3</sup> Some tappers in Palawan do the tapping on the fork or branches 25 to 30 meters above the ground. The incision is either horizontal or inclined. Other tappers in Nueva Vizcaya and Nueva Ecija make the initial tapping on the tap root which necessitates the digging of a cavity near the root. Although the resin collected is said to be clean and white this practice may impair the life of the tree.

fresh cut<sup>4</sup> just immediately above and close to the first cut and so on. The tree can be tapped to a height that the tapper can reach using a ladder for convenience. When the highest possible tapping is reached and the tapped area has completely healed, the tapper may repeat the process from the bottom and upward but on the untapped portions.

Because the resin exuded by the tree hardens in a short time, there is no need for using gutters or cups to collect the exudate. However, the resin

<sup>4</sup> It is important that the width of the subsequent cuts be narrow (4 to 10 millimeters wide) because the tissues are stimulated and more resin ducts are present near the old wound.

may be collected in an improvised funnel made of anahau leaf or bark of some trees. Care should be taken in the collection to obtain a product as clean as possible.

Generally, newly-tapped trees are relatively poor resin yielders but their yield increases after tapping for a year or so.

Almaciga resin or Manila copal is graded according to its solubility in alcohol, cleanliness, color and size. The latest standard grades of Philippine Manila copal set forth by the Bureau of Commerce, Department of Commerce and Industry in 1958 are given in the table on page 4.

(Continued on page 44)

### STANDARD GRADES OF PHILIPPINE MANILA COPAL

Grade	Size	Cleanliness	Color	Solubility
1	Bold pieces	Very clean, scraped, clear, soft	White to amber, translucent	Insoluble deposit 2 cc. or 95% to 100% soluble in ethyl alcohol.
2	Bold pieces	Clean, scraped, soft, with very little foreign matter	White to amber	Insoluble deposit 3 cc. or 92.5% but below 95% soluble in ethyl alcohol.
3	Bold and/or nub pieces	Clean, scraped, with some foreign matter	Brown and/or yellow	Insoluble deposit 3 cc. or 90% but below 92.5% soluble in ethyl alcohol.
4	Nub pieces	Clean, scraped, with some bark of fiber, mixture of grades 1, 2 and 3	Mixed colors	Insoluble deposit 3 cc. or 90% but below 92.5% soluble in ethyl alcohol.
5	Bold pieces (sorts)	Contain some bark, wood and foreign matter	Dark	Insoluble deposit 4 to 5 cc. or 90% but below 92.5% soluble in ethyl alcohol.
6	Chips	Contain some bark and wood	Mixed colors	Insoluble deposit 5 to 7 cc. or 87.5% soluble in ethyl alcohol.
7	Seeds and dust	Contain some bark, wood, and foreign matter	Mixed colors	or 87.5% but below 90% soluble in ethyl alcohol. Insoluble deposit 5 to 7 cc. or 87.5% soluble in ethyl alcohol.
8	Unassorted lot			Insoluble or partially soluble, exceeds 7 cc.

## THE COORDINATING FACTORS . . .

(Continued from page 14)

immediately result in its censure by the other. Among all the other agencies, failure of one to conform to what is considered multiple-use forestry and sustained yield management will bring sharp criticisms from the other agencies.

### REMARKS

The thesis of this article may be stated thus: through the recruitment and education of personnel the decentralization of functions, the mode of financing and the multiplicity of forestry agencies themselves, policy goals are achieved in an otherwise unfavorable administrative setup.

However, one should not conclude from this statement that the arrangement is perfect. While it is true that substantial accomplishments have been made in forest policy implementation because of the reasons enumerated, it is probably not valid to say that the *status quo* is the best and that it should be maintained.

Integration from the federal level to the states is an impossibility, both from the constitutional standpoint and from the individualism and independence of the states. On the federal level, however, it is highly probable that a much more efficient implementation of policy could be attained if many of the agencies, especially those engaged in actual forest management such as the Bureau of Land Management, the Forestry Division of the Bureau of Indian Affairs and the Forest Service were integrated into a single agency. Everybody is agreed that the expected result of efficiency would be attained if this were consummated. It is interesting to note, however, that this attempt has always failed, not because of the disagreement over the beneficial results that would follow, but because of the disagreement as to where the

new agency would be lodged, i.e., whether at the Department of Agriculture, the Department of Interior or in a separate department (1).

Basically, this disagreement is rooted in the historical backgrounds of the agencies involved. The Department of Interior has been associated with land frauds and other irregularities during its early years, perhaps, unavoidably. On the other hand, the Forest Service, largely because of the crusading zeal of its earlier leadership, has always been viewed as the paragon of efficiency and incorruptibility. Hence, the opposition against integration is not because of the absence of any rationale in the proposal but because of past involvements.

In spite of this institutional barrier, the point must still be made that for greater efficiency and economy in forest land administration, integration of the federal agencies with basic forestry responsibilities is imperative. The approach must be cautious, however. Forcing the issue at present may intensify the discord. Instead, closer cooperative relationships should be promoted and expanded. This, I think, will in time break the seeds of institutional distrust. If and when this is attained, then integration may be attempted.

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Hollydene Hotel  
Hobart, Tasmania, Australia  
March 31, 1963

Dear President Romulo:

I feel it my duty to inform you of some observations I have made while on a study and observation tour here in Australia under the Colombo Plan.

This country, as you know, is a very big one; has a land area equal to that of the U.S. excluding Alaska; and is bigger than continental Europe. It is sparsely populated with less than 11,000,000 people but it is rich in various natural resources such as minerals, agricultural crops like wheat, wool, mutton, dairy products, forests in some regions, harbours and rivers, extensive coal deposits, oil, etc. It also has big areas of deserts or semi-arid regions in the interior. The greater bulk of the population is spread along the eastern, southern and south-western coastal regions.

My present program enables me to visit forest products laboratories, pulp and paper mills, veneer and plywood plants, and other wood using industries, commonwealth and state forests in Queensland, New South Wales, Victoria, Tasmania, South Australia, and Western Australia. I came here on Feb. 27 last and expect to be back in the Philippines on April 23, 1963.

Yesterday afternoon, the Chairman of the Forestry Commission here in Tasmania kindly took me around this city of Hobart, which is beautifully planned and developed, and to the suburbs and to nearby Mt. Wellington (4,166 feet elevation). This mountain resort is connected to Hobart by a good asphalted road and can be reached from the city by car in less than 20 minutes.

From the top of this mountain a very beautiful, breath-taking panoramic view of the surrounding regions unfolds itself to visitors. One can see Hobart's deep harbours, the small-sized sprawling city busy with heavy industries such as electric generation, chemical and fertilizer production, etc., the River Derwent, and in the distances well-managed forests, dairy farms, apple orchards, etc. Tasmania, by the way, exports a lot of apples, pulp and paper, and timber.

The main purpose of sending to you this letter, Mr. President, is to suggest if I may, *the development of our Mt. Makiling*, which is now under the jurisdiction of the U.P., the completion of a good road leading to the summits, the construction of cottages with water and electricity to let to tourists or visitors, who may want to stay overnight or for several days there, the establishment of an arboretum and the effective conversion of Mt. Makiling into a wild animal sanctuary so that the people of the Philippine can be proud of it in the days to come. Mt Makiling is very near Manila and at its base are situated several research institutions and two colleges of the U.P. Foreign scientists or visitors often go to Los Baños and it will be an added feather to our cap if these visitors could also be conducted to the peak of Mt. Makiling from which, I am sure, they can command a good view of the surrounding picturesque countrysides.

Of course, a lot of money will be needed and that this project cannot be done overnight. However, a request by you concerning the development of Mt. Makiling, addressed to the President of the Republic and to our Congress, I am sure, will not just be set aside but, on the contrary, will be given serious study and due consideration. Enclosed herewith, Mr. President, is a colored photograph depicting a part of Hobart City in Tasmania. At the background is snow-covered Mt. Wellington.

So long, Mr. President.

My best wishes for the success of your administration.

Very truly yours,

(Sgd.) MANUEL R. MONSALUD  
Director  
Phil. Forest Products Research Inst.

◇ ◇ ◇

FARM AND HOME DEVELOPMENT OFFICE

January 23, 1963

Mr. Pelusio R. Celzo  
Forestry Residence Hall  
College of Forestry  
Dear Mr. Celzo:

I owe you a debt of gratitude for returning to me a check in the amount of NINETY-FOUR DOLLARS AND FORTY-FOUR CENTS (\$94.44)

ONLY payable to the Travellers Insurance Company, together with the notices for my Insurance Policy. I am very thankful to have the check and papers back in my possession. I have been looking desperately for them but could not find them anywhere.

I am now looking for a chance to prove my gratitude to you. Would you come to my house one of these days? Make a phone call first to make sure that I am there. I would like to have you look over my books and select one that may appeal to you. Please come and give me a chance to do just a small thing for you, in return for the favor you did for me.

I am sending a carbon copy of this letter to your Dean, Dr. Gregorio Zamuco. He will certainly be pleased to know that you are one of the conscientious and honest students in his College.

Sincerely yours,  
(SGD.) H. VON OPPENFELD  
Visiting Professor

\* \* \*

University of the Philippines  
COLLEGE OF FORESTRY  
College, Laguna

April 12, 1962

Forester Carlos Sulit  
808 P. Domingo  
Corner Mendoza St.  
Sta. Ana, Makati  
Rizal

Dear Forester Sulit:

This is to acknowledge with thanks receipt of the publication listed below which you thoughtfully sent to our College. Dean Zamuco has placed them in our library where they can be easily accessible to our faculty members and students. Thank you again for your continued interest in our College. Very truly yours,

(Mrs.) PET D. STA. IGLESIA  
Librarian

Journal of Forestry:  
Vol. 31, nos. 2, 4-8, 1933  
32, nos. 1-9, 1933  
33, 1935  
34, nos. 5-12, 1936  
35-39, 1937-1941

GIRL SCOUTS OF THE PHILIPPINES  
Padre Faura, Ermita  
P.O. Box 1448  
Manila, Philippines

November 27, 1962

Mr. Carlos Cunanan  
Deputy Administrator  
Reforestation Administration  
Diliman, Quezon City  
P.O. Box 2363, Manila  
Dear Mr. Cunanan:

Thank you very much for your letter of November 20th furnishing us with a list of regional headquarters and Reforestation Projects and their location, in answer to our request.

This list will undoubtedly be a useful guide to our local councils to better assist girl scouts undertaking the seed collection and plant nursery project. We hope that in this service activity our girls may, in a small measure, contribute towards "furthering the cause of reforestation."

With sincere regards and best wishes.

Sincerely yours,  
(Sgd.) MARIQUITA S. CASTELO  
National Executive

\* \* \*

University of the Philippines  
COLLEGE OF FORESTRY  
College, Laguna

Bislig Bay Lumber Co., Inc.  
Mangalay, Bislig, Surigao del Sur  
January 7, 1963

The President

Makiling Literary Club  
U.P. College of Forestry  
Dear Mr. Goze:

This is to acknowledge receipt of your letter of December 7, 1962 and in response to your request, I am remitting herewith my humble contribution of ₱10.00 under M.O. No. 1388/11002 which I really incurred so much hardships to save after numerous expenses this past Christmas and New Year's celebration. However insignificant the amount is I consider it a privilege to be called upon for assistance in any way I could be of help to our Alma Mater.

My best wishes and hope for a successful celebration, I am.

Fraternally yours,  
MARTIN P. LOPEZ

University of the Philippines  
COLLEGE OF FORESTRY  
College, Laguna

December 26, 1962

The Dean  
University of the Philippines  
College of Forestry,  
College, Laguna

Sir :

As per our commitment, we are enclosing herewith our check No. C 308949 in the amount of ONE HUNDRED PESOS (₱100.00) in response to the letter dated December 3, 1962 of Mr. Rosalio B. Goze, President of the Makiling Literary Club.

Our best wishes for your success in your undertaking.

Fraternally yours,  
GUILLERMO PONCE

\* \* \*  
University of the Philippines  
COLLEGE OF FORESTRY  
College, Laguna

The Makiling Literary Club  
College of Forestry  
College, Laguna

Att. Mr. Rosalio B. Goze, President

Gentlemen:

Please find enclosed herewith Postal Money Order No. 412784 for ₱30.00 as our humble share for the acquisition of your curtains, piano, and devoutly hope for your success in your undertaking.

Thanking you for your Christmas and New Years Greetings, and wishing you in return all the best that the Season and the coming Year will have in store for you.

Very truly yours,  
MR. & MRS. MACARIO A. MARIANO

\* \* \*  
University of the Philippines  
COLLEGE OF FORESTRY  
College, Laguna

Office of the Dean  
March 20, 1963

Mr. Macario S. Sana  
Officer in Charge  
Timber Management Station  
Bureau of Forestry  
Gonzaga, Cagayan

Sir :

This is to acknowledge receipt of your letter of March 11, 1963 and Postal Money Order No. 260/17020 in the amount of ₱60.00 dated March 11, 1963 covering your contribution and the men listed therein to the purchase of curtains and piano for the College of Forestry. I wish to thank each and everyone of you most sincerely for your generous contributions. It is gratifying to know that our alumni and friends, particularly yourselves, are very willing to assist us in our worthy projects.

Your contribution is now being given to the Makiling Literary Club who is sponsoring the project.

Best wishes and good luck.

Very sincerely,  
GREGORIO ZAMUCO  
Dean

December 28, 1962

\* \* \*  
University of the Philippines  
COLLEGE OF FORESTRY  
College, Laguna

D-2. Cooperation  
Prof. Jose B. Blando  
College of Forestry, U.P.  
College, Laguna  
My dear Prof. Blando:

We received your letter of December 23rd.

We are sending you herewith Postal Money Order No. 536/209178 of even date for ₱20.00 as the little help of the personnel of the district for your benefit.

We wish you success in all your undertakings. A Happy New Year and please let us know whenever we can be of assistance.

Very sincerely yours,  
ALEJANDRO T. TREMOR  
District Forester

## LET US DEVELOP . . . .

(Continued from page 2)

sons that can really go into proper operations;

2. Guarding, by providing enough forest guards, with the cooperation of forest concessionaires;

3. Delineation, by providing permanent demarcations of forest reserves and concessions;

4. Penalty, by strictly penalizing those violating forest laws, rules and regulations; and,

5. Method of logging or forest management, by making concessionaires or operators follow strictly forest management methods of operation, like selective logging.

I also believe that reforestation can be conducted more vigorously by the government, with the cooperation of concessionaires and licensees.

Furthermore, I suggest that licensees should be granted along long-range lines. This will allow licensees to plan on a long-range basis.

## UTILIZATION

I believe in the industrialization of the logging industry. But the setting up of veneer and plywood plants require huge outlay of capital. This problem can be relieved by the liberalization of our banking system and the adoption by lending institutions of liberal policies on producers credit.

As of now, there are only 7 to 8 veneer plants and 17 to 18 plywood factories in the country. There is room for much more. And I believe that it should be toward this our policies should be shaped. An industrialized wood industry would mean more foreign exchange earnings, greater employment opportunities, and bigger real income for people dependent on these industries directly or indirectly.

Let it be said, however, that industrialization should ever be geared to maximum utilization or ever increasing recovery in the wood industries.

These are my thoughts on our developing wood industries. You are the people who will fit in here. You have a big stake in these industries. I hope you will exert your talent, know-how and knowledgeability toward making it prosper healthily as the years go by for the benefit of our people and country.

I thank you.

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## FPRI HIGHLIGHTS . . . .

(Continued from page 32)

has been sticking together because "in union there is strength". This is the FPRI spirit that knows no end. Let us keep it up.

## FPRI NEWSLETTER TAKES A BOW

At long last, the FPRI has its Newsletter out Monday, March 11, 1963. This is a weekly bulletin on Institute activities intended for the enlightenment of the employees of the Institute. With this local organ let us keep the "home fires burning" for the common good of everybody in the FPRI.

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## ALMACIGA RESIN . . . .

(Continued from page 39)

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# Campus Notes



## TAMESIS DONATES STEREO BAFFLES

Regent Florencio Tamesis, manager of the Philippine Wallboard Corporation donated to the U.P. College of Forestry thru Dean Gregorio Zamuco two 1½' x 2' x 3' mahogany stereo baffles. Although this pair of gadgets still lack the speaker the College intends to raise the fund to purchase the necessary speakers.

Former Dean Tamesis mentioned about his plan to donate the pair of baffles last December 1962 when the adviser and president of the Making Literary Club went to his office to solicit his patronage for the "Walking Canes and Fans" play sponsored by the said club last January in its kick-off drive to raise funds for a new stage curtain and piano for our college auditorium. He also mentioned that the public address system of the college, especially the speaker had deteriorated that it needed a change. Because of his love for the college he gave to Prof. B. Blando and club president Rosalio Goze a pair of baffles which was delivered to the College of Forestry (are ready for picking up at his residence.)

## REYES, CUNANAN AND RAVELO SPEAK AT SENIORS MANAGEMENT SEMINAR

In an attempt to familiarize the seniors who are taking Management 4 (Forest Organizations and Working Plans) and to supplement their classroom lectures, Foresters Martin Reyes and Juan Ravelo of the Bureau of Forestry and Deputy Administrator Carlos Cunanan of the Reforestation Administration were invited as guest speakers at a Management 4 class seminar held on March 15, 1963 at the new Forest Technology Laboratory.

Forester Reyes explained the management status of the country's forests and the management procedures of the Bureau of Forestry of which he is the Assistant Division Chief of the Management Division. He further elaborated on the methods of determining the allowable cut and their application in connection with the implementation of the selective logging policy of the bureau.

Deputy Administrator Carlos Cunanan talked about the function of the Reforestation Administra-

tion and further enlightened the students about their future should they choose to join the RA. He mentioned some fine job opportunities for graduating forestry students which, however, require of them interest, resourcefulness and responsibility.

Forester Juan Ravelo also talked about the functions and make-up of the Special Uses Division of the Bureau of Forestry. He mentioned some techniques in the preparation of inspection reports and courses of correspondence.

The guest speakers were treated to a lunch at the Lake View Resort before the discussion resumed in the afternoon where an open forum was held.



## CUMIGAD, ENRIQUES. GOLD MEDALISTS IN SPEECH-DECLAMATION TILT

At the pre-Moving-Up day literary-musical program held under the auspices of the Makiling Literary Club in the evening of March 28, 1963, Bernardo Cumigad, a freshman, and Erico Enriquez, a senior, emerged gold medal winners in the extemporaneous speaking contest and declamation contest, respectively. Cumigad's piece was entitled "Democracy, A Way Of Life" while that of Enriquez was entitled "A Gladiator's Appeal".

Other winners were:

Extemporaneous speech: Crisostomo Vilar, silver medalist and Mariano Jurado, bronze medalist.

Declamation: Herminio Sambajon, silver medalist and David de Guzman, bronze medalist.

The skit presented by the UPSCA (Forestry Chapter) won first prize in the skit contest.

The presentation of a pre-Moving-Up day literary-musical program has become a traditional activity of the Makiling Literary Club. And this year, as a contribution to the college, the MLC thru its energetic adviser, Prof. Jose B. Blando, presented during the same program the new college auditorium curtains the club has purchased as a result of its fund campaign.



## BENZON, HILARIO, AWARDED MEDALS

At the commencement exercises of the Los Baños Reserve Officers Training Corps Unit held at the Baker Hall on Monday, March 18, 1963, Jesus P. Benzon and Emmanuel Hilario, both cadet majors, were awarded the "Duty Medal" and "Loyalty Medal", respectively. The other two awardees for "Leadership" and "Efficiency" are Aggie cadet officers.

During their last year in the ROTC, Cdt. Capt. Benzon was company commander of the Alfa Company, IBCT while Cdt. Maj. Hilario was Corps Adjutant and SI.

This year the Los Baños ROTC UNIT turned out a total of 225 graduates — 13 from the Advance ROTC Course and 212 from the Two-Year Basic Course. Of the 212, there are 61 forestry students, 134 aggie students and 17 Laguna Institute students.



## DEPT' CHAIRMEN APPOINTED

In its desire to make the different established departments of the College more distinct and functional, the faculty met last February 1, 1963 to nominate the chairmen of the different departments. Basing on the greatest number of times a faculty member is nominated for the chairmanship of a particular department by other faculty members, the dean appointed the following as department heads with their respective members:

*Department of Public Information:* D. V. Jacalne, chairman; R. Garcia, B. O. Lim, A. Mabesa and G. Valeña, members.

*Department of Arts & Sciences:* L. L. Quimbo, chairman; E. F. Albano, J. B. Blando, E. de Guzman, C. B. Lantican, R. M. Magno, V. L. Saplala, S. B. Silverborg, B. C. Sinues, F. N. Tamolang and W. L. Webb, members.

*Department of Forest Utilization Engineering:* R. C. Yaptenco, chairman; A. H. Bishop, R. T. Cortes, D. M. Lantican, F. S. Pollisco, F. O. Tesoro, A. A. Villafior, F. L. Viray, members.

*Department of Forest Resources Management:* J. D. Lamanilao, chairman; L. D. Angeles, A. W. Bacdayan, E. Z. Cajucom, R. A. del Castillo, R. A. Clemente, R. C. Delizo, I. L. Domingo, D. M. Faustino, Jr., J. K. Kraemer, F. Lozano, F. P. Mauricio, A. G. Mordeno, A. C. Pascua, C. Recto, A. V. Revilla, Jr., B. R. Rola, F. Rosqueta, G. Urgino,

O. M. Valderama, N. T. Vergara, and N. Zabala, members.

Ninety-nine per cent of the faculty were present in the organizational meeting.



## FORESTRY GOLDIES RAP BF MAROONS

Under-rated Los Baños champion, the Forestry Goldies, spilled the Bureau of Forestry Maroons, 53-51, during the Moving-Up Day games played at the College of Forestry basketball court on March 29, 1963.

In the first half, Hilario, Dy, Morales, scoring almost at will and Cruz, Reboton dominating the boards, the Forestry Goldies had little difficulty in turning the tables against the Bureau of Forestry Maroons.

The favored forestry five erected a one-point lead at halftime and were in complete command until the Maroons touched off a futile rally in the closing minutes with the hands of Balones, Garcia, and Abalos.

Balones charged with a jumpshot but Hilario soloed to put the score at 51-49. Then came Carolinos foul on Willie Dy. Dy converted the two shots. Final score was 53-51 in the Forestry Goldies' favor.

In the other game, the forestry faculty-student-employee selection smothered the defending champion, Reforestation Administration. In the first half, the RA scored heavily under the arms of Eddie Ocampo, ex-UAAP skipper Unite, the ex-captain Segueria but the forestry selection rallied at the end to take the lead at the first half, 31-30. Then the forestry selection pulled away in the final half and made a 10-point lead at clocktime, 84-74.

How they scored:

FORESTRY GOLDIES	BF MAROONS
R. de la Cruz . . . . . 10	L. Balones . . . . . 23
W. Dy . . . . . 9	B. Garcia . . . . . 10
E. Hilario . . . . . 8	R. Abalos . . . . . 10
D. Morales . . . . . 8	I. Carolino . . . . . 6
W. Reboton . . . . . 6	R. Cortes . . . . . 2
O. Hamada . . . . . 4	A. Mondolado . . . . . 0
A. Blando . . . . . 4	I. Vela Roza . . . . . 0
A. Pascua . . . . . 2	E. Enriquez . . . . . 0
P. Galinato, Jr. . . . . 2	D. Tobias . . . . . 0
53	E. Cantuba . . . . . 0
	51



## SEVENTY-THREE STUDENTS TO GRADUATE

The college of Forestry, this year, turned out a total of seventy-three graduates, twenty-two of whom were awarded the Forest Ranger Certificate during the Moving-Up Day Convocation at the College Auditorium last March 30, 1963. Fifty-one were conferred the degree of Bachelor of Science in Forestry at the commencement exercises held at the University of the Philippines, Diliman Campus, on April 7, 1963.

Of the seventy-three, 2 finished the BSF degree and 6 finished the Ranger Course at the end of Summer, 1962; 10 finished the BSF degree and 5 finished the Ranger Course at the end of the first semester, 1962-63; and 39 finished the BSF degree and 11 finished the Ranger Course at the end of the second semester, 1962-63.

Romulo C. Casilla who hails from Cabaroan, San Fernando, La Union, tops the graduation list this year as *cum laude* with an average grade of 1.556 for the whole eight semesters that he stayed in the college. Casilla has various honors accredited to his name; he, having been elected to important positions since his first year in the College of Forestry. This year, he is the secretary of the Forestry Student Body Organization, PRO of the Makiling Literary Club and fellow herald of the Zeta Beta Rho Fraternity. He was contributing editor to the *Forestry Leaves* in 1961 and became eventually its editor in 1962. He had been class representative to the FSBO during his second year (1960-61) and class treasurer during his junior year. He is also a member of the Phi Sigma Society.

Recipient of the Ahern Gold Medal, Casilla had been entrance scholar in 1959, university scholar for two semesters (1959-60), college scholar for four semesters (1960-62), and a Bureau of Forestry scholar for seven semesters (1959-63).

### CANDIDATES FOR GRADUATION 1962-1963

*For the BSF DEGREE, as of the end of Summer, 1962:*

1. Aranas, Armando L
2. Urgino, Gil V

*For the RANGER CERTIFICATE, as of the end of Summer 1962:*

1. Ausan, Adam S
2. Corpuz, Teodolfo S

3. Mendoza, Antonio M
4. Pilor, Rodolfo R
5. Santos, Sabio Jr. S
6. Tacugue, Johnson L

*For the BSF DEGREE, as of the end of the First Semester, 1962-63:*

1. Alonzo, Dominador S
2. Festin, Senecio D
3. Gulmatico, Conrado V
4. Guzman, Francisco F
5. Hinchiranan, Sompol
6. Lacuesta, Gil L
7. Llavore, Nelson
8. Macaraeg, Saturnino O
9. Paclob, Emilio A
10. Rodulfa, Emeterio

*For the RANGER CERTIFICATE, as of the end of the Semester, 1962-63:*

1. Bacena, Conrado P
2. Boado, Artemio B
3. Gatan, Florante M
4. Llacuna, David P
5. Orsolino, Rogelio S

*For the BSF DEGREE, as of the end of Second Semester, 1962-63:*

1. Albay, Jaime L
2. Bucsit, Arsenio R
3. Burgos, Segundo T
4. Cabrereros, Gerardo T
5. Cantuba, Rogelio D
6. Cariño, Honorio F
7. Casilla, Romulo C
8. Cayabyab, Policarpio L
9. Dagdayan, Oton Jr. N
10. Dispo, Orlando D
11. Dotimas, Victor Jr. N
12. Duzon, Rodolfo C
13. Ebuna, Marcelino N
14. Esber, Gayred G
15. Felias, Tanciano G
16. Gines, Fernando A
17. Gonzales, Vidal A
18. Goze, Rosalio B
19. Guerrero, Claudio C
20. Ishmael, Al Rashid H
21. Lucop, Aligan D

22. Macumbal, Macorro L
23. Mariano, Angel A
24. Mendoza, Pepito M
25. Pascua, Arthur C
26. Patague, Ignacio G
27. Pavo, Aniceto S
28. Perez, Juan M
29. Pescasio, Leon O
30. Picardo, Alberto C
31. Quintana, Eddie I
32. Rayos, Jose A
33. Reboton, Wilfredo I
34. Suaverdez, Lamberto U
35. Suguitan, Oscar A
36. Tomacder, Alejandro A
37. Tremor, Ernie Jr. M

38. Versoza, Lamberto N
39. Vertudes, Carlito P

*For the RANGER CERTIFICATE, as of the end of the Second Semester, 1962-63:*

1. Agustin, Rogelio C
2. Balilia, Sergio P
3. Binua, Tomas M
4. Blando, Augusto M
5. Ladrillono, George G
6. Nacino, Alfonso B
7. Pascua, Agustin Jr. N
8. Rebosura, Reynaldo F
9. Saavedra, Marcial Q
10. Sonico, Faustino M
11. Tavita, Josefino L

### ON EMPLOYEE DEVELOPMENT . . . (Continued from page 10)

At the same time, we at the Civil Service Commission have exploited ways and means of disposing of the backlog of unacted papers that have accumulated on our desks for lack of personnel. I have cancelled the observance of summer office hours to enable the CSC personnel to make use of every available time to cope with the workload. I have created a special task force to work double time on contested appointments. And not only that, I have sought the services of volunteer workers from other offices and agencies to help us work on the unacted papers with dispatch.

All this I say to let you see how an employee's attitude towards his work should be conditioned to the needs, the exigencies of the service. When a work to be done seems herculean, a public servant must not whimper at first encounter. He must tackle it and tackle it well. He must have the guts and grit to face the situa-

tion with nothing in mind but the prospect of doing the job with satisfaction.

But I believe that whatever I have started in the civil service cannot be done by one man alone. All other employees of the government must rally to the cause in the same manner that they should band themselves together when their security and lives are being threatened.

I need your cooperation and your acceptance of the validity and importance of what I am trying to do for the civil service system. Be one with me in my efforts to give the Civil Service Law and Rules full force and to instill compliance among government employees anywhere. I am confident, that if you and I will share the same attitude and work together, hand in hand, we cannot fail.

I thank you.





**DEAN GREGORIO ZAMUCO**  
College of Forestry



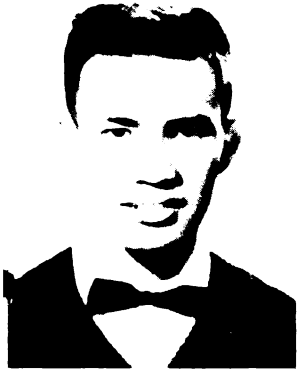
**CLAUDIO GUERRERO y CARIAGA**  
Pasquin, Ilocos Norte  
Bachelor of Science in Forestry  
B. F. Scholar (7 semesters)  
Bus. Mgr. Forestry "Y" Club (1961-62)  
Charge d'Affaires, Zeta Beta Rho Fraternity  
(1961-62)  
Contributing Editor, Forestry Leaflets (1961-63)  
Delegate, 40th Annual College Student Confab  
(1961)  
Fellow Herald, Zeta Beta Rho Fraternity (1961-62)  
President, Junior Class (1961-62)  
President, Senior Class (1962-63)  
Vice Pres., Freshman Class (1959-60)  
Vice Pres., Ilocos Norte Varistarians (1959-60)  
Member, FPH Board of Councilors  
Makiling Literary Club



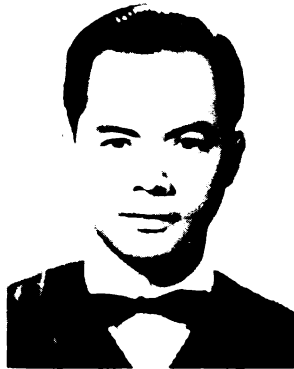
**GAYRED ESBER y GAYOLA**  
Bulan, Sorsogon  
Bachelor of Science in Forestry  
Ranger Certificate (1956)  
Entrance Scholar (1954)  
B. F. Pensionado (2 semesters)  
Vice Pres., Senior Class  
Auditor, Makiling Literary Club  
Member, Pensionado Club  
Zeta Beta Rho Fraternity



**J. D. LAMANILAO**  
Adviser



**BENIGNO ABUGAN JR. y GARCIA**  
Banua Best House, Fagudud, Ilocos Norte  
Bachelor of Science in Forestry  
Cadet Officer, UP Los Baños ROTC Unit  
Auditor General, Vanguard Fraternity  
Member: Folk Art Society  
UPSCA



**JAIME ALBAY y LAPITAN**  
Los Baños, Laguna  
Bachelor of Science in Forestry  
B. F. Scholar, (4 semesters)  
Ass. Editor, Forestry Leaves  
Rep. to SBO, Junior Class  
News Editor, Forestry Leaflets  
PRO, SBO (1962-63)  
Member: Makiling Literary Club  
Pensionado Club



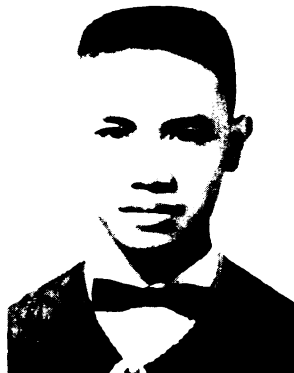
**MANUEL BANDONG y PAMULAKLAKIM**  
528 Trade School Drive, So. Obrero, Davao City  
Bachelor of Science in Forestry  
Ranger Certificate (1961)  
Auxiliary Chancellor, Alpha Phi Omega Int'l  
Service Fraternity (Theta Chapter), 1962-63  
Member: UPSCA



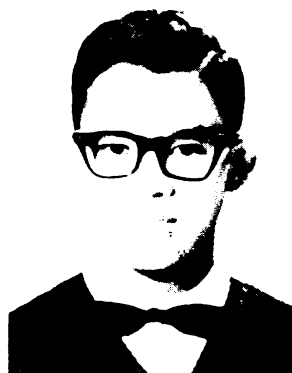
**DEMETRIO BARTOLAZO y LOPEZ**  
Iwangan, Dupax, Nueva Vizcaya  
Bachelor of Science in Forestry  
Ranger Certificate (1961)  
Member: Forestry Leaves Staff  
Makiling Literary Club



**ISMAEL CAMELLO y ERUMA**  
Lilio, Laguna  
Bachelor of Science in Forestry  
Ranger Certificate (1961)  
Member: Granarian



**GERARDO CABREROS y TOLENTINO**  
Bonfal, Bayombong, Nueva Vizcaya  
Bachelor of Science in Forestry  
Member: UPSCA



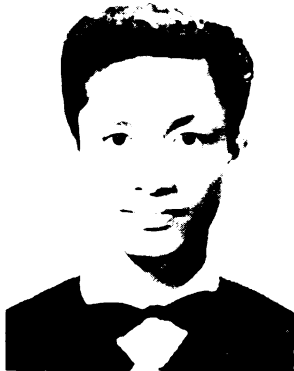
**SEGUNDO BURGOS y TOLENTINO**  
Tranca, Bay, Laguna  
Bachelor of Science in Forestry  
Ranger Certificate (1960)  
B. F. Scholar (one semester)  
Athletic Manager (Senior Class)  
Member: UP Forestry Alumni Assn.  
UPSCA  
Zeta Beta Rho Fraternity



**ARSENIO BUCSIT y RAMOS**  
Quirino, Bacnotan, La Union  
Bachelor of Science in Forestry  
Ranger Certificate (1960)  
Aras-asan Timber Company, Inc. Scholar  
(3 semesters)  
Sgt. at Arms, Senior Class (1962-63)  
Member: YMCA, Los Baños Branch  
Forestry Volleyball Team (1958-60)  
UP Forestry Alumni Assn.



**ROGELIO CANTUBA y DRAGAS**  
 San Fernando, Masbate  
 Bachelor of Science in Forestry  
 Rep. to UPSCA Central Council (1962-63)  
 Member: Alpha Phi Omega Fraternity  
 Makiling Literary Club



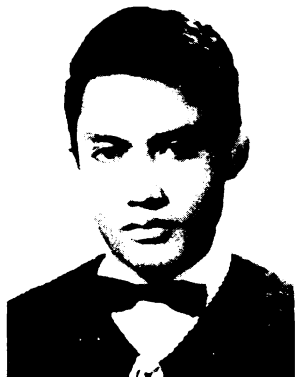
**HONORIO CARINO y FARINAS**  
 2352 Fuentes St., Singalong, Manila  
 Bachelor of Science in Forestry  
 B. F. Scholar (7 semesters)  
 Treas., Freshman Class (1959-60)  
 Treas., SBO (1960-61)  
 Auditor, SBO (1961-62)  
 Member: Beta Sigma Fraternity  
 Pensionado Club  
 Makiling Literary Club



**ROMULO CASILLA y CASUGA**  
 Cabaruan, San Fernando, La Union  
 Bachelor of Science in Forestry  
 (Cum laude)  
 Entrance Scholar (1959)  
 University Scholar (2 semesters)  
 College Scholar (4 semesters)  
 B. F. Scholar (7 semesters)  
 Editor, Forestry Leaves (1962)  
 Contributing Editor, Forestry Leaflets (1961-62)  
 Fellow Herald, Zeta Beta Rho Fraternity  
 PRO, Makiling Literary Club (1962-63)  
 Rep. to SBO, Sophomore Class (1960-61)  
 Secretary, SBO (1962-63)  
 Treas., Junior Class (1961-62)  
 Member: Phi Sigma Society



**BERNARDINO DACANAY y BATTAD**  
 Cabataan, Iuzam, Cagayan  
 Bachelor of Science in Forestry  
 Member: YMCA



**POLICARPIO DASIG y UROUIZA**  
 Sto. Niño, Hinunangan, Southern Leyte  
 Bachelor of Science in Forestry  
 Ranger Certificate (1961)  
 Member: Forestry Soccer Team



**ORLANDO DISPO y DAGDAG**  
 472 Narra Street, Butuan City  
 Bachelor of Science in Forestry



**VICTOR DOTIMAS JR. y MEJIA**  
 San Nicolas, Pangasinan  
 Bachelor of Science in Forestry  
 B. F. Scholar (5 semesters)  
 Auditor, SBO (1962-63)  
 Auditor, Junior Class (1961-62)  
 Fellow Whip, Zeta Beta Rho Fraternity (1961-62)  
 Sgt. at Arms, SBO (1961-62)



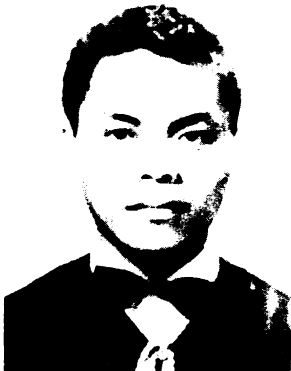
**RODOLFO DUZON y CARISO**  
 Cabuloan, Urdaneta, Pangasinan  
 Bachelor of Science in Forestry



**MARCELINO EBUNA y NERI**  
 Subec, Pagudpud, Ilocos Norte  
 Bachelor of Science in Forestry



**CORNELIO EWOC y GARMING**  
 Tanulan, Kalinga, Mt. Province  
 Bachelor of Science in Forestry



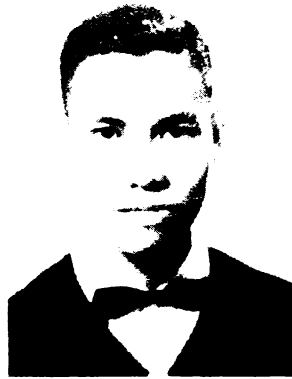
**TANGIANO FELIAS y GODINEZ**  
 Natchip, Agusan  
 Bachelor of Science in Forestry



**CRISANTO GALO y AGUSTIN**  
 Sta. Catalina, Binalonan, Pangasinan  
 Bachelor of Science in Forestry



**VIDAL GONZALES y ALLERMO**  
Alatoo Staff House, Naga City  
Bachelor of Science in Forestry  
Member: Alpha Phi Omega Fraternity (Theta Chapter)  
UPSCA



**ROSALIO GOZE y BELARAS**  
Bucay, Abra  
Bachelor of Science in Forestry  
Ranger Certificate (1955)  
B.F. Pensionado (4 semesters)  
Pres., SBO (1962-63)  
Pres., Makiling Literary Club (1962-63)  
Vice Pres., Junior Class (1961-62)  
Editor, Forestry Leaves (1962-63)  
Managing Editor, Forestry Leaves (1962)  
College Editor, The 1963 Philippinensian  
Associate Editor, Forestry Leaflets (1962-63)  
PRO, Pensionado Club (1962-63)  
Fellow Fiscalizer, Zeta Beta Rho Fraternity (1961-62)  
Member: Upsilon Sigma Phi



**OSCAR HAMADA y MONROE**  
34 Kisad Road, Baguio City  
Bachelor of Science in Forestry  
1st Vice Grand Prince, Beta Sigma (1961-62)  
2nd Vice Grand Prince, Beta Sigma (1960-61)  
Member: Vigilance Committee (1959-60)  
Forestry Basketball Team (1960-62)  
Forestry "Y" Club



**EMMANUEL HILARIO y TULIO**  
Altavas, Aklan  
Bachelor of Science in Forestry  
Silver Medalist (ROTC Duty Medal), 1961  
Adjutant General, Vanguard Fraternity (1962-63)  
Athletic Manager, Junior Class (1961-62)  
Cdr. Officer, Los Baños ROTC Unit  
Capt. Ball, Los Baños Intramural Basketball Champ (1962)  
Co-Capt. Ball, Los Baños Intramural Basketball Champ (1960)  
Member: UP Basketball Varsity (1961)  
UP Los Baños Basketball Varsity (1960-63)  
Forestry Basketball Team (1959-63)  
Forestry Volleyball Team (1960-63)



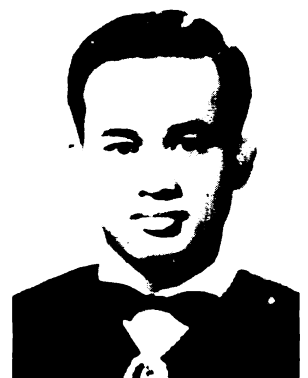
**ALIGAN LUCOP y DALASDAS**  
Napsong, Kibungan, Benguet, Mt. Province  
Bachelor of Science in Forestry  
Entrance Scholar (1959)  
CNI Pensionado, (8 semesters)  
Sgt. at Arms, Junior Class (1961-62)  
Pres., Mountaineer Students' Club (1962)  
Associate Member, Society of Filipino Foresters  
Member: Forestry Pensionado Club  
Free Thought Society of the Philippines  
Assn. of CNI Pensionados



**SATURNINO MACARAEG y ORPIANO**  
Sta. Maria, Pangasinan  
Bachelor of Science in Forestry  
Ranger Certificate (1960)  
Letter Recipient, UP Los Baños Volleyball Team (1961)  
Capt. Ball, Forestry Volleyball Team  
Member: UP Los Baños Volleyball Team



**MACORRO MACUMBAL y LIDASAN**  
Batangan Bubong, Lanao del Sur  
Bachelor of Science in Forestry  
CNI Pensionado (8 semesters)  
Fellow Scribe, Zeta Beta Rho Fraternity  
PRO, Junior Class Organization  
Rep. to SBO, Senior Class  
Member: CNI Student Pensionado Assn.  
Muslim Student Pensionado Assn. of the Philippine  
Makiling Literary Club  
Forestry Pensionado Club  
Forestry Soccer Team



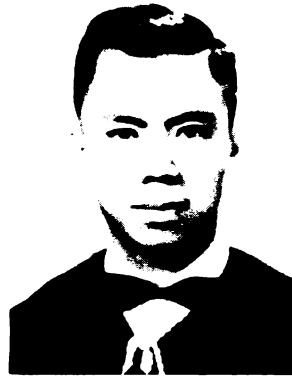
**ALFREDO MADRID y TUMBAGA**  
Dalumpinas Weste, San Fernando, La Union  
Bachelor of Science in Forestry  
PRO, UPSCA Forestry Chapter (1962-63)  
Treas., Summer Forest Inventory Class (1962)  
Member: Alpha Phi Omega Fraternity (Theta Chapter)  
Vigilance Committee (1960-61)



**BEN MALTO y DOMINGO**  
Namasac, Sanchez Mira, Cagayan  
Bachelor of Science in Forestry



**ANGEL MARIANO y AMIER**  
Baliwasan Grande, Zamboanga City  
Bachelor of Science in Forestry  
Ranger Certificate (1955)  
B.F. Scholar (8 semesters)  
First Place, Spanish Declamation Contest (1955)  
Associate Editor, Forestry Leaves  
Bus. Rep., The 1963 Philippinensian  
Rep. to the Student Union (1962-63)  
Rep. to the SBO, Junior Class  
Bus. Mgr., Junior Class  
Secretary, Forestry Pensionado Club (1962-63)  
Secretary, Makiling Literary Club (1962-63)



**ANTONIO MENDOZA y MAISBAL**  
Sta. Lucia, Moscada, Tarlac  
Bachelor of Science in Forestry  
Ranger Certificate (1962)  
Vice Supreme Fellow, Zeta Beta Rho (1962-63)  
Asst. Ctr. Mgr., Forestry Leaves (1962-63)  
Sgt. at Arms, Junior Class (1961-62)  
Member: Makiling Literary Club



**PEPITO MENDOZA y MEJIA**  
84-D Rizal Street, Dagupan City  
Bachelor of Science in Forestry  
Ranger Certificate (1961)  
Member: Makiling Literary Club  
Forestry "Y" Club  
UPCA Alumni Association



**ISIDRO NALLUPA y ESTOQUE**  
Asno, La Union  
Bachelor of Science in Forestry  
Ranger Certificate (1960)  
Member: Beta Sigma Fraternity



**R. CIPRIANO PAET y BAUTISTA**  
Lanoc, East Maunoc, Pangasinan  
Bachelor of Science in Forestry  
Member: Makiling Literary Club (1962-63)  
Forestry "Y" Club  
Forestry Soccer-Football Team (1962-63)  
Vigilance Committee  
UPSCA (1959-62)



**PANGAGA P. PANGCOGA**  
Pantao Masiu, Lanao del Sur  
Bachelor of Science in Forestry  
Ranger Certificate (1961)  
CNI Pensionado (9 semesters)  
Member: Muslim Student Assn. of the Phil.  
CNI Student Pensionado Assn.



**ARTHUR PASQUA y GORPUZ**  
Balestern, Cagayan  
Bachelor of Science in Forestry  
ROTC Advance Course Graduate (1962)  
Vice Pres. UP Vanguard Fraternity (Los Baños Chapter), 1962  
1st Battalion Commander, UP Los Baños Corps of Cadets (1961-62)  
Regimental Adjutant & S-1, UP Los Baños Corps of Cadets (1960-61)  
1st Battalion S-2, UP Los Baños Corps of Cadets (1959-60)  
Member: Cadet Officers' PMA Team (UP Los Baños ROTC Unit), 1961  
UPSCA  
Associate Member: Phil. Society of Aerial Photography



**LEON PESCASIO y OCON**  
Mawan, Bambang, Nueva Vizcaya  
Bachelor of Science in Forestry  
Member: Forestry Softball Team (1961-63)  
YMCA, Forestry Chapter



**IGNACIO PATAGUE y GANCESA**  
Binalonan, Pangasinan  
Bachelor of Science in Forestry  
Associate in Nautical Science (FNMS, 1957)  
Ranger Certificate (1961)  
Bus. Mgr., Forestry Leaves (1961-63)  
Bus. Mgr., Senior Class (1962-63)  
PRO, FRH Assn. (1961-62)  
Delegate, College Students Conference, Baguio City (1961)  
Associate Member, Society of Filipino Foresters  
YMCA, Los Baños Chapter  
Member: Makiling Literary Club



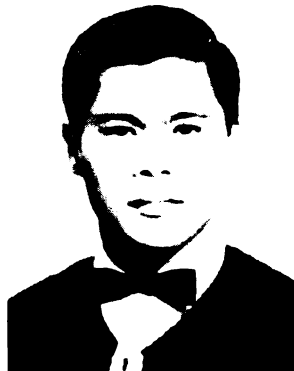
**ANICETO PAVO y SANTOS**  
Palina Sur, Urdaneta, Pangasinan  
Bachelor of Science in Forestry



**EDWARD PECSON y BENITO**  
Lapogan, Gattaran, Cagayan  
Bachelor of Science in Forestry  
Member: Alpha Phi Omega Int'l Service Fraternity  
UP Los Baños ROTC Band  
UPCF YMCA



**JUAN PEREZ y MEQUI**  
Tuguegarao, Cagayan  
Bachelor of Science in Forestry  
Ranger Certificate (1958)  
Entrance Scholar (1956)  
B.F. Pensionado (4 semesters)  
Second Place, Extemporaneous Speech Contest (Moring-Up Day, 1962)  
Councilor, FRH Assn. (1961-62)  
Fellow Bursar, Zeta Beta Rho Fraternity (1962-63)  
Treas., FRH Assn. (1962-63)  
Treas., Makiling Literary Club (1962-63)  
Treas., SBO (1962-63)  
Member: Forestry Chapter (1962-63)



**ALBERTO PICARDO y CUSTODIO**  
931-A Bohol St., Sampaloc, Manila  
Bachelor of Science in Forestry  
Ranger Certificate (1955)  
B.F. Pensionado (4 semesters)  
Pres., Forestry "Y" Club (1962-63)  
Rep. to SBO, Makiling Literary Club (1962-63)  
Secretary, Junior Class (1961-62)  
Secretary, Senior Class (1962-63)  
Staff Member, Forestry Leaflets (1962-63)  
Member: Zeta Beta Rho Fraternity  
YMCA  
Associate Member: Phil. Society of Aerial Photography



**EDDIE QUINTANA y INGHOCO**  
Tungao Logging Camp, Butuan City  
Bachelor of Science in Forestry  
B.F. Scholar (7 semesters)  
Treas., Senior Class (1960-61)  
Treas., YMCA, Forestry Chapter (1961-62)  
Auditor, Sophomore Class (1960-61)  
Fellow Whip, Zeta Beta Rho. (1962-63)  
Member: Pensionado Club  
Phil. Society of Photogrammetry  
Vigilance Committee  
Forestry Track & Field Team



**ROGELIO RAGASA y LACUNA**  
Claveria, Cagayan  
Bachelor of Science in Forestry  
Auditor, UPSCA Forestry Chapter (1962-63)  
Member: Vigilance Committee (1960-61)



**AL RASHID ISHMAEL y HANA**  
 Bus-bus, Jolo, Sulu  
 Bachelor of Science in Forestry  
 CNI Scholar (10 semesters)  
 Asst. Cir. Mgr., Forestry Leaves (1961-62)  
 Bus. Mgr., Makiling Literary Club (1962-63)  
 Cir. Mgr., Forestry Leaves (1962-63)  
 Councilor, FRH Assn. (1961-63)  
 Fellow Whip, Zeta Beta Rho Fraternity  
 Vice Pres., Sophomore Class  
 Supreme Fellow, Zeta Beta Rho Fraternity  
 Member: Vigilance Committee  
 Forestry "Y" Club



**JOSE RAYOS y ARNALDO**  
 158 K-2nd, Kamuning, Quezon City  
 Bachelor of Science in Forestry  
 Ranger Certificate (1929)  
 Reforestation Administration Pensionado  
 Pres., Pensionado Club (1962-63)  
 Vice Chairman, JCEA, Ref. Adm.  
 Member: Beta Sigma Fraternity  
 Society of Filipino Foresters  
 Phil Veterans Legion, DANR Chapter



**GIL REBONG y MOLE**  
 Victoria, Laguna  
 Bachelor of Science in Forestry



**LAMBERTO SUAVERDEZ y UNGRIANO**  
 Infanta, Quezon  
 Bachelor of Science in Forestry  
 PRO, Senior Class (1962-63)  
 Member: Zeta Beta Rho



**OSCAR SUGLITAN y AGBAYANI**  
 Vintar, Ilocos Norte  
 Bachelor of Science in Forestry  
 Auditor, Senior Class (1962-63)  
 Member: Vigilance Committee (1960-61)  
 YMCA  
 Zeta Beta Rho



**BONIFACIO SUMAJIT y SABORDINO**  
 Tapel, Gonzaga, Cagayan  
 Bachelor of Science in Forestry  
 Member: Makiling Literary Club  
 UPSCA



**ALEJANDRO TOMACDER y AMBROCE**  
 Sta. Catalina, Binalonan, Pangasinan  
 Bachelor of Science in Forestry



**JUANITO UGALINO y RACCA**  
 Magsingal, Ilocos Sur  
 Bachelor of Science in Forestry  
 B.F. Pensionado (4 semesters)  
 Member: Beta Sigma Fraternity  
 Pensionado Club  
 Makiling Literary Club  
 UPSCA



*A view of a portion of an established plantation of a reforestation project under the Reforestation Administration which has now more than 100,000 hectares of established plantations under maintenance*

# R. A. Doings



Forestry Advisor Eugene Roberts plants a memorial tree, a molave (*vitex parviflora*), at the Magat Re-forestation Project as Foresters B. Ordinario and C. Guerrero and some members of the MRP personnel look on.



Reforestation Administrator J. Viado doing his share in the commemorative tree planting at the establishment of an EEA Camp at Balara, Quezon City as EEA Coordinator E. Ocampo, NEC Coordinator T. Adevos, and NWSA Gen. Manager J. Perlas are looking on.



The Federation of Women's Club of Baguio undertakes to put back the green mantle that once clad the now barren hills of Baguio, with the help and guidance of RA personnel.



At the Aklan Reforestation Project, school children, parents, teachers and RA personnel share in the tree planting ceremonies.

# Literary Attempts

## The College of Forestry

By

ROSALIO B. GOZE—BSF '63

The conservation of the country's forest resources is a painstaking job requiring technical training and skill in forestry as well as spirit of dedication. The occurrence of national tragedies like floods and soil erosions resulting from the depletion of our forest reserves has awakened public consciousness to the importance of our forest heritage and has spurred the necessity of improving the protection, management, and conservation of our forest and soil resources. This task of protecting and conserving our forest wealth as a perpetual source of goods and services for our economic well-being is the duty of every citizen but nobody has the profound and zealous concern in this kind of work except the foresters and the forest rangers. These special groups of people who are the bulwark of forest conservation movement in the Philippines are the graduates of the only institution of its kind in the country.

The College of Forestry, University of the Philippines, has since 1910 been training young men and women for the proper administration, wise utilization and development of our valuable forest resources. Forest conservation assumed paramount significance in the wake of catastrophes brought about by the alarming proportions of forest destruction throughout the country. Due recognition of forestry as a career and the College's valuable contributions to the national economy and progress of the country came only after year-

ly floods and long droughts pointed to the tragic effects of forest denudation.

The College of Forestry is located within the well-known Makiling National Park at Los Baños, Laguna. It has a lovely campus which lends an ideal atmosphere conducive to forestry training. In 1910, by virtue of Act 1989, it was created only as a department of the College of Agriculture but it became a School of Forestry, a distinct unit of the University in 1916 by virtue of Act 2578, and in 1949 by Republic Act 352, as a College of Forestry. Through the help of various agencies like the ECA, MSA, PHILCUSA-FOA, ICA and AID, the old temporary buildings used for students' quarters and classrooms have been replaced by modern concrete edifices completely furnished with modern facilities and laboratory equipments. A modernized curriculum has been introduced and an expanded faculty with advance training abroad has greatly strengthened classroom instruction. During its early stages of development, the College has had its difficulties aggravated by the non-glamorous appeal of forestry as a profession to the youth of the land but somehow it managed to survive the crisis for its crucial role in the economic development of the country.

All the changes and improvements the College of Forestry has had in its fifty-three years of existence added color to its unique history. In spite of all these, however, it is still felt that it needs support

to accomplish the following objectives: (1) to set a high standard forestry education in the Orient, (2) to serve as a dissemination center of forestry knowledge and information and (3) to provide competent professional foresters to meet the growing demands of wood-using industries and allied enterprises. There is also the crying need for experimental forest and a forest experiment station where the faculty and students could make observations, conduct experiments and studies regarding dendrology, silviculture and other phases of forestry. These two are basic requirements for an effective educational program. Research is fundamental to professional instruction and its development is also a requisite to the continued growth of the College as the nation's center of forestry edu-

cation and information. But the College is haunted by the persistent problem of inadequate funds.

Today the College of Forestry counts only on 1,200 alumni to carry on the task of forest conservation but it hopes to produce more and better quality graduates when its objectives, mentioned above, will have been realized. Scattered not only in the Philippines but also in other countries like India, Thailand, Guam, China and Borneo, these alumni are rendering their faithful and fruitful services in various capacities both in the government and private business, contributing in no small measure their share to the nation's progress and prosperity.

## *Forest Conservation and Floods*

By

JUAN M. PEREZ

The recent floods in Mindanao are again grim reminders to us all in this country of the pressing need for FOREST CONSERVATION. Annually, floods occur in those areas in Mindanao and other places in the country with tremendous and increasing damages to life and property, but it seems the people are slow to learn from these great calamities of the importance of forests.

There are only two factors in this country essential for a successful program of forest conservation; these are, the people and our lawmakers.

It is sad to note that in this country, which is considered as one of the most advanced countries in Asia in Forestry Science, a greater portion of the population still have the notion that forests are hindrances to agricultural progress. This is a fallacious idea which should be wiped out instantly from the minds of the people to

save our remaining valuable forest resources. We should look forward now to forest conservation as a means of minimizing the dreadful consequences of floods. The cooperation of every individual in this country is greatly needed in order that the government will succeed in its program of forest conservation.

We have many good laws for the protection of our forest areas. Some of these forest laws however, are now impractical to apply to present conditions of the country, so they need to be modified to suit present trends. Our lawmakers should also continue to pass vital measures essential for sound forest management and conservation in this country.

In general, we citizens should be forestry-conscious from now on to put an ebb to these unforgettable calamities. WE MUST STOP NOW wanton destruction of our forests before it's too late.



# B. F. Notes

## BACKLOAD

Undersecretary of agriculture Esteban S. Piczon, concurrently acting director of forestry, urged the bureau's division chiefs to act speedily on numerous cases that have piled up for several years.

Piczon was appointed concurrently director of forestry vice Dr. Mateo S. Pecson who is on leave.

In a convocation held last week upon assumption of office in the forestry bureau, Piczon said he does not want visitors commuting back and forth to the bureau without their cases being acted upon.

The time and effort spent by visitors should be taken into consideration, he said: We owe it to the public, he stressed, to extend the most satisfactory service. Piczon said he expects only two things from forestry employees: service and honesty.

Piczon bared he will take drastic steps to eliminate influence peddling if it really exists in the bureau. He also directed his staff to adopt necessary safeguards against the rampant loss and misplacement of records.

Forestry assistant director Juan L. Utleg told the check-scaler graduates to do their job accurately so that every centavo due to the government from forest-users can be collected. Utleg revealed that about 40% of logs are not scaled and assessed for forest charges collection.

Meanwhile, supervising information officer Amador J. Evangelista announced that the bureau's monthly official organ *Forest Echo* will be out next week. Evangelista edits the bureau's paper with Felipe B. Chicano, Jr., acting PRO, as associate editor.—A/E

• • •

## EXPANSION

Director Mateo S. Pecson said he will propose to Congress the conversion of the forestry bureau into commission which will include the reforestation administration and the parks and wildlife office for effective supervision, coordination and economy.

Pecson said in the United States and other progressive countries including some in Asia, the government forestry agency is a one whole department. Under his proposal, Pecson said, the forestry com-

mission will be headed by a commissioner and assisted by deputy commissioner for reforestation and a deputy commissioner for parks and wildlife.

It will be recalled that former forestry director Florencio Tamesis and some lumber magnates deplored the "breaking up" of the activities of the bureau of forestry.

Meanwhile, the district foresters' convention in Davao City opened last Tuesday (Feb. 15th). Pecson urged the foresters to enforce all forestry laws without fear and warned them against connivance with violators. He said that before he leaves the bureau he will see to it that the nation's forests are perpetually productive for all generations and that the forestry bureau regains its former reputation as one of the most efficiently managed government offices.

Last week, Director and Mrs. Pecson honored the new forestry lawyers in a party given by the bureau's legal research division headed by Celestino Sabalo. Assistant director Juan L. Utleg advised the lawyers to spur the moral regeneration program in the bureau while forestry project coordinator Florencio Asiddao delivered the invocation.—A/E

\* \* \*

## MINDANAO OF CONVENTION

*(Special to the Philippines Herald)*

DAVAO CITY.—Feb. 8—A semblance of private ownership of public commercial forests to provide incentive to timber concessionaires for scientific management, protection and conservation of forest resources will be recommended by Director Mateo S. Pecson.

Speaking at the Mindanao district foresters' convention which terminated here last week, Pecson said that 65-75% of the forests in the United States, Japan, Malaya, New Zealand and other countries is privately owned. In the Philippines, he said, 97-1/2% of the forests is owned by the state and only 2-1/2% is of private ownership.

Pecson bared he will study the feasibility of granting timber licenses of longer term to concessionaires who are found to be capable of maintaining their areas under scientific management program of the forestry bureau.

He outlined his two important objectives which he pledged to accomplish with the assistance of the EEA.

(1) Forest conservation.

(2) Intensified forestry charges collection.

Pecson said he expects an annual collection of ₱70 million with the adoption of a better assessment system.

Pecson stressed that the protection of second growth forests or residuals resulting from selective logging practice should be given more attention. He said he will suggest to the reforestation administration the formulation of a working agreement on the protection of residuals.

Col. Emmanuel Ocampo, EEA performance director and EEA forest conservation assistant director Primitivo Galinato briefed the foresters on the objectives of the employment administration. They assured the district foresters that EEA trainees assigned in the forest conservation project are dedicated workers.

Accompanying Pecson as resource speakers were division chiefs Severino Nablo, Jorge Miranda and Segundo Fernandez, assistant division chiefs Martin Reyes and Vicente Leonor, Sr., supervising information officer Amador J. Evangelista, personnel officer Manuel Añonuevo, foresters Jose Claveria, Doroteo Antonio, Justino Ibañez and Policarpio dela Cerna.

Davao district forester Higinio Rebosura and personnel were hosts.—AJE

## ACCOMPLISHMENTS

Of the total land area of the Philippines, the bureau of forestry has already classified and certified as alienable and disposable 12,271,292 hectares or 41.26½ and delimited for forest purposes 7,254,599 hectares or 24.39%, leaving 10,215,399 hectares or 24.45% still to be classified.

This was bared by director Mateo S. Pecson in his 1962 calendar year report to the President. The land classification program of the bureau, Pecson said, calls for establishment of the necessary balance of soil cover for the country. This means, he explained, that about 17.2 million hectares (58%) of the total land area will be for agriculture and about 12.4 million hectares (42½%) will be for forestry.

Pecson said that areas classified as alienable and disposable are certified to the bureau of lands for disposition under the Public Land Act to bolster agricultural production and to accelerate the resettlement program of the administration. Areas

found suitable for forestry purposes, he said, will be for timber production which concurrently serve as water and soil conservator. The rugged and mossy forests will be mainly for protection purposes and development of wildlife while the swamp lands will be used to sustain fishpond, firewood, tanbarks and saltworks industries, Pecson said. Part of the open forest will be for grazing industry, he said.

President Macapagal, Pecson said, has recognized the role of forestry in the development of the national economy by including forest conservation as one of the top projects in his socio-economic program. Pecson reported that one of his important accomplishments was the stamping out of graft and corruption for which the bureau had been notoriously known in the past.

Meanwhile, Pecson directed his supervising information officer Amador J. Evangelista to draft a sustained forestry information campaign in a nation-wide scale. He said jailing kaiñgineros will not stop forest destruction as the offenders will repeat the crime as soon as they are released from a very light jail sentence. The people especially those in the forested areas should be made to realize the value of forests in their daily lives.—AJE

## DUMMY

Forestry director Mateo S. Pecson said that a congressional probe of grant of forest concessions to dummies is most welcome as he himself has been exploring the legal means to flush them out since he assumed office barely nine months ago.

Rep. Antonio V. Raquiza (L, Ilocos Norte) asked the other day the House committee on forests to probe grant of forest concessions to dummies and the indiscriminate cutting of trees.

Pecson said he finds it hard to go after dummies in the absence of concrete proofs as required by law. The anti-dummy law, he suggested, should be re-examined by congress. He assured congress of the cooperation of his bureau in the proposed probe.

On the charge that forests have already parceled out to unqualified concessionaires, Pecson said he has started looking into questionable awards of timber licenses by his predecessors. In fact, he said, he has proposed the revocation of licenses granted under Forestry Administrative Order 11-13 which have not put up processing plants within the period provided by the said regulation.

Pecson said under his administration, the forestry bureau has adopted a firm and strict policy against concessionaires violating the terms and conditions of their licenses. He said he has ordered forest officers

throughout the country to rigidly supervise cutting in logging areas and to stop forest destruction. Forest scalers, he said, have been instructed to do scaling work right in the cutting area for accurate tax assessment. Forestry revenue collection is expected to increase to ₱70 million a year under the program he has adopted, he said.

Pecson said he hopes his efforts will not be hampered by political pressures. Congress can boost our forest conservation program, he said, by giving the forestry bureau a bigger annual appropriation to enable it to employ more personnel in the field and by passing the necessary forest legislation.—*AJE*

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### ADEVOSO ORDERS NO FOREST CLEARANCE

Officials of the land clearance projects under the EEA-NARRA program have been instructed to clear only areas fit for agricultural and resettlement purposes and to keep intact forest lands.

This was bared by Secretary Adevos, EEA administrator in the opening day of the Luzon district foresters convention held in Manila recently.

Director Pecson said he was for the retention of forest lands for scientific and productive management. The clearing of forests especially in vital watersheds might produce disastrous results, he said.

Adevoso was applauded by the district foresters when he made the announcement. He urged the foresters to rally the people in their respective regions behind the socio-economic program.

\* \* \*

### UTLEG STRESSES MORAL REGENERATION IN FORESTRY

“The obsession of Director Pecson for the restoration of the prestige the Bureau used to enjoy should spur every forestry employee to give his very best in the form of public service.”

This was the counsel of assistant director Juan L. Utleg to forestry employees in a party tendered recently in his honor.

Lauding President Macapagal's moral regeneration program, Utleg said any good job performance will avail to nothing if the performer's virtues are highly questionable.

Meanwhile, Forestry Project Coordinator Florencio Asiddao demonstrated a rare gesture of sportsmanship when he publicly pledged his cooperation to Assistant Director Utleg.

Called by Director Pecson as the “dean of foresters” in the Bureau, Asiddao is one of the forestry pioneers.

\* \* \*

### BAN THIRD PARTIES FROM BF

No party will be allowed to transact business with the bureau of forestry without proper authorization from the actual timber licensee or applicant for forest concession he represents.

Director Pecson said this requirement is aimed at eliminating fixers who ply their trade in the bureau.

He has also required forestry personnel to wear their ID plates during office hours to enable visitors to know the right employees to approach and to fix properly responsibilities for every official action.

Pecson warned licensees and applicants against employment of fixers. Violation of this order might give cause for the cancellation of licenses or rejection of applications, he said.

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### FORESTERS' CONFERENCE

*Davao City*—The first regional conference of Mindanao district foresters was held here Feb. 5-9. Director Mateo S. Pecson attended the conference.

Manila officials who participated were division chiefs Severino Nablo, Jorge Miranda and Segundo P. Fernandez, assistant division chiefs Martin R. Reyes and Vicente Leonor, Sr., personnel officer, Manuel Añonuevo, foresters Justino Ybañez, Policarpio dela Cerna, Jose Claveria and Doroteo Antonio, Messrs. Vicente Leonor, Jr., Joe Sarreal, Eddie Santos and A. J. Evangelista also attended.

From the EEA the participants were Col. Emmanuel Ocampo, performance director, forest conservation asst. director Primitivo Galinato and their assistants.

Davao District Forester Higinio D. Rebosura was the host. He was ably assisted by Forester Mac Bacena, Forester Felipe R. Reyes, forest guard Felicidad Peralta, Mrs. Antonia A. Barnes, and several others.

The members of the working committees were District Foresters E. Elayda and F. Abijay on forest management; D. Juni and J. Cabiles on land uses; L. Torea and S. Morao on sawmills & scaling; M. San Luis and J. Ilagan on general administration; F. Roy and E. Balanon on research & accounting; M. Caayupan and F. Barros on domain use.

Pecson was impressed with the enthusiasm of the district foresters in improving the service.

\* \* \*

the 3rd year will just be a reproduction count and a rapid check on any damage to the residual stand. The succeeding remeasurements will be repetitions of the initial measurement. All of the field data observed in a tree will be entered in the corresponding index card.

These silvicultural researches were started with great enthusiasm and high expectations. With the three agencies cooperating in these projects, viz., the College of Forestry, the Bureau of Forestry, and the licensees, protection and maintenance of these studies is more or less secure. To minimize destruction of the plots, the study sites were settings at approximately in the center of the corresponding license areas, at a distance from the main log-

ging roads, and their corners marked with conspicuous posts of durable trees and their boundaries marked with painted trees at breast height. In addition to these security measures, a placard was placed in the junction of a main road and a spur road leading to each silvicultural project installation.

The objectives of these cooperative silvicultural research projects were limited to their experimental design. Upon the organization and correlation of field data from the projects, however, new findings might be discovered and stimulate more silvicultural studies aimed at deeper understanding of and fuller knowledge on the species composing the Philippine dipterocarp forest.

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## THE ROLE OF . . . .

*(Continued from page 10)*

the teaching function, the lack of personnel, and the lack of facilities and funds. But this year we are starting to meet this other important function of the College.

Research is an indispensable tool in a program of industrialization. There is shortage of it right now and it is time to attend to this very important arm of any industry. In the United States, there is the Forest Service (including the U.S. Forest Products Laboratory), many colleges and universities, and trade associations, in addition to the research departments of private companies doing research on only a few hundred tree species. A similar situation exists in other advanced foreign countries. In comparison, we have only the Bureau of Forestry, the College of Forestry, the Forest Products Research Institute, and the Reforestation Administration doing research on our more than 3,500 tree species. Here again, the support of the wood industry is needed and hereby solicited.

This then is the vital role of the Col-

lege of Forestry in the industrialization of the wood industry—the source of technical men trained in a program that keeps pace with the needs of a growing industry and of new knowledge and techniques in forest management and utilization through research. With more support which it deserves, we can do a better job in performing our functions.

We will always keep you informed through our publications and other media and through our department of Public Information and Extension about recent developments in teaching and research at the College of Forestry. We hope that you will keep us informed, too, of your needs and problems so we can keep pace with them. We will always be glad to help you in any way we can. As a matter of fact, the College of Forestry exists mainly to deal with public forestry problems and to help the wood industry.

I Thank You.

# Forestry in the News

## GOV'T MAY BAN LOG EXPORTS TO HALT WIDE DEFORESTATION

(By CIP APOLINARIO)

The bureau of forestry has finished a 35-page document calling for the eventual banning of log exports.

Labelled as the "future timber requirements and prospective supply," the blueprint will be submitted to President Macapagal for approval.

Dr. Mateo S. Pecson, forestry director, released the document in a move to arouse officialdom on the dangers of deforestation.

Pecson, however, said that a ban on log exports may be enforced as soon as wood processing installations could be established.

The installations of pulp and paper mills, more plywood and veneer mills, fiberboard and particle board mills and other wood processing plants are now in the works, Pecson reported.

Once these plants are established, log exports will be gradually reduced. This will also pave the way for an intensive and extensive forestry development, he said.

The Philippine population explosion will see increasing demand for wood and wood products. Government concern is so sharp about this matter that it plans to limit timber harvests.

One of the initial steps to halt uncontrolled forest diminution is contained in Republic Act 3092 passed by Congress in 1961 and signed into law by the President. The law in effect assured the permanency of forests of the country.

The average timber cut of licensed concessionaires is 2.6 billion board feet a year. Forestry experts said that Philippine forest wealth can stand an increase of another billion board feet a year without endangering an imbalance to the expected growth.

But timber destruction, both legal and illegal, conspired to upset the programming of lumber production to such an extent that the next generation may not have enough trees for protection, Pecson said.

Pecson said the socio-economic program of President Macapagal is determined to halt forest des-

tructions in the next five years. Selective system of timber harvesting has been strictly enforced.

The laying of boundaries for the permanent national forests will be pursued, he said.

Since 1953 when the selection system of harvesting was adopted, more than one million hectares of forest concessions have been placed under this program.

Statistics compiled from 1955 to 1961 showed that the country produced an average of 2.1 billion board feet of timber; 436 million board feet of lumber; and 271 million square feet of veneer.

To cut down on exportation of these products, the government required the producers to put up more wood-processing plants. The Forest Products Research Institute is currently undertaking studies on uses of fuelwood, sawnwood for housing and construction, packaging and paper packaging newspaper and other printing materials.

Pecson said that a forest inventory by photogrammetry has been started. Regular flights will continue up to 1964 when accurate data of the nation's forest wealth will be completed.

(The Sunday Times — Oct. 28, 1962)

## TIMBER EXPORTERS RAP FORESTRY HEAD

The Philippine Association of Log Producers and Exporters (Palpe) labelled as "irresponsible" Forestry Director Mateo S. Pecson's proposal to limit log exports.

Valeriano C. Bueno, Palpe president, issued a statement defining the stand of the association in answer to Pecson's policy.

Earlier Pecson submitted to President Macapagal a so-called white paper on the lumber situation. One of his proposals was to ban log exports to conserve the forest wealth of the nation.

However Pecson qualified his proposal by saying that the ban may be enforced only with the establishment of more veneer and processing industries.

Valeriano refuted Pecson by pointing out that the capacity of processing industries could hardly dent the volume of log exports.

"Such a ban will not only destroy the logging industry which earns the third largest foreign exchange receipts but will dislocate thousands and thousands of workers now employed in the logging industry," he said.

He warned that any talks emanating from official levels would hurt the long-standing trade relation between the Philippines and Japan.

Bueno also listed a three-point stand of the association against Pecson's announced program:

1. The ban should be enforced on the basis of actual requirements of processing plants in the country;
2. The logs earmarked for processing be bought by plant operators at prices that would be profitable to the log exporters;
3. The export ban be announced in advance in order not to snarl the trading arrangements with log importers.

Pecson's initial step to divert big time timber operations was to encourage the exploitation of minor forest areas.

Minor forest products keep home industries going in some provinces. Pecson said the bureau has issued 2,059 licenses for the cutting, collection and removal of minor products. With a capital investment of more than ₱2 million the licenses are mostly for firewood, split and unsplit rattan, almaciga, nipa shingles, charcoal, diliman, boho, tanbark and lum-bang nuts.

Minor forest products licenses were issued for applicants in Quezon, Palawan, Samar, Zamboanga del Sur, Davao, Pangasinan, Negros Occ., Cotabato, Cagayan and Surigao.

*(The Sunday Times — Nov. 4, 1962)*

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## EEA TO HIRE 2,670 FOR FORESTRY WORK

The Emergency Employment Administration will hire 2,670 men in its forest conservation program, Eleuterio Adevos, presidential executive assistant, concurrently acting EEA administrator, disclosed.

Positions available are 50 foresters, 50 forest guard supervisors, 500 forest guards, 100 surveyors, 300 laborers to assist in surveying, 35 check scalers, 350 scaler aides, 70 clerical aids to scalers, 25 technical researchers, 15 clerical aides to researchers, 25 training officers and 1,150 forest aides.

Adevoso said applicants for foresters, forest guard supervisors, surveyor check scaler and researcher must be agriculture or forestry graduates. For the semi-technical positions applicants must be at least high school graduates.

The 1,150 forest aides must be 18 to 25 years old, unmarried out of school and jobless. Fifty per cent of the successful applicants will come from Luzon, 25 per cent from the Visayas and 25 per cent from Mindanao.

Meanwhile, the 25,000 casual laborers of the Reforestation Administration will receive hiked wages beginning October. The increase was 45 centavos a day of the basic wage.

Reforestation Administrator Jose Viado explained that this was in line with the new policy of extending monetary aid to the employees on temporary basis.

Benefited by the increase are fieldmen undertaking reforestation work in the agency's 61 projects.

The pre-service training for new fieldmen under the agricultural extension project of the Emergency Employment Administration will be conducted in three different places in the country starting Oct. 12 to Nov. 22.

Director Eloy M. Baluyut of the bureau of agricultural extension and concurrently chief of the agricultural extension project of the EEA, announced the schedule for the training namely: Oct. 12 to Nov. 12 at Camp Tinio, Nueva Ecija for Luzon trainees; Oct. 15 to Nov. 15 at Cebu City for Visayans; and Oct. 22 to Nov. 22 at Zamboanga City for Mindanao

Baluyut said that some 500 agricultural extension workers and 200 livestock inspectors have been called to undergo this training prior to their assignments in the field.

*(The Sunday Times — Oct. 21, 1963)*

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## NEW FORESTRY DIRECTOR TO STOP TIMBER RAIDS

Acting Forestry Director Estanislao R. Bernal ordered his division chiefs to stop the illegal raids of the nation's forest riches.

He gave the order shortly after assuming office last Friday. He replaced Agriculture Undersecretary Esteban S. Piczon who had occupied the post in a concurrent capacity.

In a staff meeting, Bernal sought the aid of the police agencies to curb the continuous destruction of forest areas.

He was relieved when informed by Martin R. Reyes, assistant division chief, that there was no overcut in the public forests. Reyes explained that the allowable annual cut granted to timber licensees last year was about 87 million cubic meters equivalent to 3.7 million board feet.

The actual cut last year was 2.87 million board feet with an uncut balance of almost a million board feet.

Piczon said he received the report of assistant division chief Reyes maintaining that there is no overcut in the public forests. To prove his point, Reyes explained that the allowable annual cut granted timber licensees last fiscal year was about 8.7 million cubic meters equivalent to 3.7 million board feet determined by the growth per cent method.

Our actual cut last fiscal year, Reyes said, was only 2.87 billion board feet showing an uncut balance of almost a million board feet. He stressed that despite the additional cuts granted to licensees, the allowable annual cut based mainly on the very conservative growth per cent method had not been exceeded.

Meanwhile Juan L. Utleg, assistant forestry director, deplored the fact that there are several bills filed in Congress by some parties seeking to break up the activities of the forestry bureau. He said the present constant wranglings of various government forestry agencies serve merely to emphasize the need for a centralized agency.

Utleg directed forestry information chief Amador J. Evangelista to join efforts with the Baguio joint committee on forestry information and education in conducting a sustained campaign to arouse public consciousness on the importance of forests. Evangelista recommended to Utleg the necessity of launching a massive information campaign in collaboration with other forestry agencies.



## MAKILING SQUATTERS EJECTED COLLEGE OF FORESTRY INITIATES CAMPAIGN

Sixty-one kaingin farmers in Mt. Makiling national park have been ordered ejected by Judge Leonides L. Perlaz, justice of the peace of Bay, Laguna.

The farmers were found guilty of squatting on government property. They have cleared more than 200 hectares out of the 3,910 hectares comprising the storied Makiling national park.

Ejection proceedings against them were initiated by the UP College of Forestry under Dean Gregorio Zamuco in a determined effort to rid the national park of squatters.

The administration of Mt. Makiling area was transferred from the parks and wildlife office to the college of forestry under presidential proclamation 692 on Aug. 2, 1960.

The squatters were notified to vacate the area Sept. 9, 1959. Court action against them was filed May 9, 1960.

Judge Perlaz rejected the defense of the squatters that they had inherited their farms from their predecessors in interest. The defendants showed tax declarations and maps of private land surveyors.

The court threw out this defense because the tax declarations and survey maps were made recently. He said records showed the national park was part of the state way back in 1910.

Those ordered to vacate the national park as builders in bad faith were Lope Gutierrez, Policarpio Mansit, Eusebio Maghirang, Marta Pacheco, Marcelo Maghirang, Demetrio Casalia, Adelaida Ilagan, Felipe Jarmin, Ignacio Agdipa;

Pedro Alvarez III, Vivencio Malbataan, Alfredo Ilaw, Sofronio Javier, Severo Llanto, Anastacio Valencia, Benito Alvarez, Leocadio Valencia, Arsenio Valencia, Avelino Tiburcio;

Pedro Alvarez I, Juan Valencia, Alejandro Arenda, Pacifico Werba, Juan Reyes, Florencio Landig, Antonio Lanao, Irineo Alvarez, Gregorio Malbataan;

Torribio Sungkaya, Tereso Javier, Julian Valencia, Vicente Victoria, Ponciano Aquino, Pedro Sungkaya, Eusebio Hernandez, Urbano Hibas, Jacinto Victoria, Sixto Atienza, Vivencio Punzalan;

Damaso Lirio, Dalmacio Mercado, Estefania Nazaret, Crispulo Lanao, Miguel Punzalan, Lucas de Mesa, Blas Lanao, Juan Tapia, Pedro Werba;

Celestino Manjares, Pedro del Mundo, Ponciano de Ocampo, Felimon Mercado, Juan Mercado, Juan Jarmin, Jacinto Torres, Pantaleon Valencia, Eulogio Malabanan, Balbino Landig and Juan Manzanilla.



## PRESS RELEASE

Congressman Manuel T. Cases of La Union recently urged the Reforestation Administration to engage in an extensive planting of Molave trees especially in his province in the light of the growing need by the Manila Railroad Company of railroad ties.

In a conference with Reforestation Administrator Jose Viado, Cases underscored the importance of the scheme in connection with the projected extension of railroad facilities to the Cagayan area and Bicol provinces. Since there can be no better substitute for molave as railroad ties, it must therefore be grown in a large scale to enable it to help supply the Manila Railroad Company with the much-needed ties, according to him.

Administrator Viado in turn assured the La Union solon that Molave will be extensively propagated and then planted throughout the province's denuded forest lands on a cooperative undertaking with the local populace.

Lauding Cases for initiating such a worthwhile move, the Administrator said that such a suggestion is in line with the agency's policy of planting species that contribute to nation-building.

Meanwhile, the Administrator pressed for the tapping of other sources of funds for the reforestation following the inability of the reforestation fund collection to solely up the desired forest reclamation production of the government.

Since reforestation fund collection averages only around ₱2 million annually, the government thus lacks continually about ₱5 million more for a work goal of 40,000 hectares a year, he concluded.

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If many of the logged-over areas in Mindanao will be turned over to the Reforestation Administration, the Agency can become self-supporting in about ten years following their conversion into production forests, according to Administrator Jose Viado of the Reforestation Administration.

Administrator Viado explained that these logged-over areas which sustained-yield management was ignored, together with those already tagged for reforestation will be subjected to a large-scale planting of commercial trees and other minor species that produce such raw materials for the country's wood-using industries as resin, pulp, turpentine, rubber, oil, and tannin. The income derived from these products will enable the agency to become self-sufficient in approximately ten years, provided that

during the transition stage, the government will at least invest more funds for reforestation, he continued.

Presently, the Reforestation Administration banks for its annual appropriation on reforestation fund collection and on the contribution from the general fund. But the moment the production projects become established, we will thus have a steady source of fund with which to further the country's reforestation activities, he said.

Incidentally, tangile, red lauan, and other dipterocarps are believed fast vanishing in Mindanao because of alleged indiscriminate cutting by loggers and kaingineros. Administrator Viado however allayed fears of dipterocarps shortage, saying that the people will find substitutes in mahogany, teak, and other species which the agency is planting in large quantities in all the reforestation projects. These forest trees are, among other things, very resistant to fire, he concluded.

A forest fire believed caused by some incendiaries recently broke out at the 314-hectare forest plantation of the Magsaysay Reforestation Project in Zambales.

Reports received at the Reforestation Administration in Diliman, Quezon City revealed that the entire plantation would have been wiped out but for the timely arrival of the EEA personnel who helped the project's fieldmen put the fire under control.

It was alleged by reforestation administrator Jose Viado that either some vindictive individuals who could have been refused employment in the project or squatters asked to vacate their illegally occupied lands might have set the reforested areas afire. Similar cases have been very rampant in all the projects lately, he added.

Administrator Viado however instructed the forester-in-charge of the Magsaysay Reforestation Project to speed up investigations so that the real cause of the conflagration could be established and the culprits, tried.

Meanwhile the Reforestation Administrator revealed that the 15 youth conservation camps throughout the archipelago are doing productive reforestation work under the technical supervision of the Reforestation Administration. With their 1962-1963 10,000-hectare goal greatly augmenting that of the RA's 46,000 hectares, the country will yet see forest reclamation pacing deforestation presently estimated at 50,000 hectares annually, he concluded.

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Administrator Jose Viado of the Reforestation Administration recently warned all foresters-in-charge of the projects in Ilocandia against timber and fuelwood smugglers in the face of the fast approaching Virginia tobacco season.

The administrator explained these forest vandals are specially actively stealing trees from the plantations of the projects during these months when the tobacco-flue-curing barns need millions of cubic meters of firewood for redrying purposes.

Last year, the fuelwood consumption of the Ilocos reached upwards of 6 million cubic meters valued at approximately ₱34 million, Viado recalled. This drain in the timber reserve of the region is already too dangerous to ignore considering that Ilocandia is one of the most deforested portions of the country, he added.

To face the threat effectively, the reforestation administrator urged every project's patrol unit to adopt stricter precautionary measures for forest protection. For instance, every outsider spotted inside the reforestation project should always be under surveillance until he gets out of the plantation, according to him. The PC or the barrio lieutenant may, if necessary, also be called for assistance when forest violators get out of hand, he stressed.

Meanwhile, fast growing acacia trees will be extensively used for reforestation through the Ilocos region beginning next fiscal year.

This reforestation scheme should spur the development of wood-using industries in Ilocandia since the species is a potential source of raw materials for making furniture, veneer, and such novelties as fancy articles, floorings, and wood-carvings, according to the administrator.

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In line with the Reforestation Administration's policy of acquainting its plant propagators with the latest techniques in the raising of forest trees, a one-week seminar on plant propagation was recently held at the Montalban Reforestation Project in Rizal.

In his address to the more than sixty participants, Reforestation Administrator Jose Viado explained that the seminar has become doubly important in the light of the government's need for a more advance system of forest reproduction.

The country is presently facing a staggering forest dissipation considered the fastest in the whole world. This crisis is further aggravated by the fact that the Philippines is some 50 years behind other such countries as Japan, Germany, and the United

States in the scientific propagation of tree species, the Administrator stressed.

Since the Reforestation Administration is one of those few agencies of the government expected to help in forest conservation through modern silvicultural practices, we should therefore pool our resources together in raising only the best trees that will cover the country's more than 1.4 million hectares of denuded forest lands, according to him.

Administrator Viado also informed the participants that their technical know-how will be greatly utilized especially in the projected establishment of tree-orchards throughout the country. These orchards will be raising mother trees from which seeds of superior quality will be collected for propagation, he said.

The seminar, the second of a series programmed for this year by the agency, was sponsored by the technical services division under Forester Roman B. Valera.

pursuing reforestation activities more vigorously and since even the President of the Philippines has come to recognize forest reclamation as a vital key to the successful implementation of the new era's five-year integrated socio-economic development, according to Deputy Budget Commissioner Amable Aguiluz in a convocation held recently at the DANR Building in Diliman, Quezon City.

Paying tribute to the Reforestation Administration's impressive accomplishment, Aguiluz said that although barely two years old, the agency has already proved its efficiency and effectiveness in speedily reclaiming the country's barren lands. The laudable performance, he added, is due mainly to the dedicated efforts of the reforestation personnel and of "your reforestation administrator Jose Viado who is now considered as one of the ablest men of the administration who can really deliver the goods."

In thanking the Deputy Budget Commissioner, Administrator Viado pledged that given such a setup, the agency will definitely help more considerably in the immediate restoration of economic stability, alleviation of the plight of the masses, and establishment of a dynamic basis for future growth.

The Reforestation Administration chief also exhorted his co-workers to work harder so that they can make substantial contribution to the country's progress. Unless each employee promises to do more than his share of work, the agency's future expansion program will just be resting on soft, indefensible grounds, he warned.

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The Reforestation Administration formally opened another reforestation project at Buenavista, Quinapundan, Samar recently to boost the socio-economic program of the administration. Covering an area of about 3,000 hectares of critically denuded forest lands, the new project was dubbed officially as Samar Reforestation Project.

The inauguration ceremonies which were held at Quinapundan last January 15 were attended by reforestation administration officials, Rep. Felipe Abrigo, local government executives, and guests.

Expressing his congratulations to Rep. Abrigo and to the local officials whose determined efforts made the opening of the project possible, Administrator Viado stressed that Samar's first regular reforestation project is a symbol of the growing concern of the country towards unchecked forest denudation. It signifies the honest intentions of the administration to ward off such ill effects of deforestation as floods, erosion, droughts, and famine as well as its unceasing campaign to project to the people the importance of reforestation, according to him.

The reforestation administrator also underscored the significance of the project as an effective solution against unemployment in that area. Those who will be taken in as casual laborers will be mostly residents of the province thereby helping them survive socially and economically aside from fanning their enthusiasm in protecting their own forests, he concluded.

An inventory of living forest trees under the care of the Reforestation Administration revealed recently that there are presently 155 million principal and minor species grown in the established plantations covering an area of about 74,000 hectares, according to reforestation administrator Jose Viado.

Thousands of the timber species that have already grown mature like benguet pines, apitong, agoho, aklang parang and others could already be harvested while the minor species such as camphor, eucalyptus alnatica and albizzia falcata are ready for felling to supply the timber and allied industries with the raw materials they need, the Administrator pointed out.

The reforestation administration chief said that benguet pines which totals around 25 million surpasses other species in number. Many of the 61 reforestation projects of the agency which are scattered all over the archipelago are raising benguet pines, he said. Coming in next is ipil-ipil trees which number about 15 million. Narra, mahogany,

molave, and teak follow with more than 3 million each, he explained.

It can be clearly seen from our accomplishments therefore that reforestation is concerned not merely with planting trees to prevent erosion nor to minimize intensity of floods but also to produce more timber and minor species for the nation's lumber and allied industries, he said.

Given more funds every fiscal year, the reforestation administration will not only accomplish its goal of reclaiming the country's 1.5 million hectares of denuded forest lands but will also help push through the socio-economic program of the administration via more timber for export and for domestic uses and greater employment for thousands of casual laborers, the Administrator concluded.

. . .

The Reforestation Administration extended employment opportunities to 26,000 individuals from among the ranks of the jobless from July to December, 1962. This same agency is also expected to employ about the same number of laborers before the fiscal year ends to help facilitate the reforestation activities of the government.

According to Reforestation Administrator Jose Viado, last fiscal year's total labor power was pegged at 32,000 or about 37 per cent less than the expected goal this year.

The great difference in the present recruiting power of the office lies in the administration's determined drive against unemployment as well as in the inclusion of reforestation as one of the four pillars of President Macapagal's five-year socio-economic development program, Viado stressed.

Viado explained that the newly-employed laborers are now assigned at the 62 reforestation projects of the government which are strategically located at various points of the archipelago.

Doing field work which include the planting of trees on steep, rugged hills, nursery management, patrolling newly-established plantations, and other reforestation jobs, a great number of the recruits come from either the municipalities where the projects are situated, neighboring towns or nearby provinces. Some of them have been former kaingineros and squatters whom the reforestation administration won over the side of forest conservation through employment. These former forest vandals are now the most ardent forest protectors, according to the reforestation administrator.

Considering the present trends and attitude of the government towards reforestation, Viado stipulated that the country's forest reclamation work will outrace forest destruction within a few years.

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## ALDERMEN ACT TO AVERT DEPLETION OF WATERSHED SCRAPPING OF ALL LICENSES SOUGHT

By WILLIE CAPULONG  
*Chronicle News Service*

OLONGAPO, Zambales, Feb. 18 — CNS) — The municipal council passed a resolution last Tuesday urging President Macapagal to revoke all licenses and permits of forest concessionaires presently operating within the watershed of Olongapo.

At the same time, the municipal board also requested the Chief Executive to declared all vegetated areas of the Olongapo forests as watershed reserve areas of the municipality.

Councilor Jose Pacheco, sponsor of the move, declared during the regular session held at the Olongapo public library that unless the council takes steps to stop the logging operations at the watershed reserve of the town, Olongapo will experience drought this coming dry season.

Pacheco explained that formerly, the water reserve area of Olongapo can supply even one million residents, but with the entrance of unscrupulous timber concessionaires who wantonly destroy the watershed, the area cannot even adequately supply 20,000 residents.

There are only two creeks from which the municipality gets its water supply, according to Pacheco. These are the Mabayan creek and the Tawiran Bayan creek in Sta. Rita.

Pacheco also said that the forest reserves of Olongapo are three times bigger than the whole townsite. The forest area is 7,252 hectares while the townsite is only 1,000 hectares.

Vice-Mayor James L. Gordon, supporting the move of Pacheco, assailed the bureau of forestry officials in Manila for issuing a license to Dalma-cio Mallari of Pampanga for a 900-hectare forest concession and the right to cut 8,500 cubic meters of logs.

Gordon termed the permit "highly anomalous" because the forestry official issued the permit without even consulting the local forestry office in Zambales.

Gordon said that long before he was appointed vice-mayor by President Macapagal, he had expressed fear about the wanton destruction of forests here. "My fear came true as the result of disastrous floods that hit Olongapo last May," he added.

He said last Dec. 22, President Macapagal ordered the suspension of logging operations in the watershed of Olongapo, however, despite the order, logging operations by Mallari allegedly continued.

The municipal council, upon the motion of Gordon and Pacheco, passed a resolution also requesting the President to allow the municipality to collect fees on all illegal logs cut within the watershed of Olongapo. The sum will be used by the municipal government for public building construction.

OLONGAPO, Zambales, Feb. 18 (CNS) — Lt. Col. Claro M. Bagalso, Zambales provincial commander directed today Capt. Romeo G. Gatan, commander of the 125th PC company here, to initiate precautionary measures to prevent the eruption of violence at the logging area in San Marcelino, this province.

The provincial commander's directive was spurred by the recent mauling incidents between loggers of rival lumber operators yesterday afternoon.

Mauled were Conrado Vispera and his brother, Andres, both employees of a logging firm from Porac, Pampanga. The brothers were reportedly accosted by Jesus Smith and Francisco Ago, loggers from another firm who late allegedly beat up the victims.

(*The Manila Chronicle* — Feb. 19, 1963)

## GOV'T PLANTS 40 M TRESS

Forty million forest trees were planted to more than 25,000 hectares of critically denuded areas throughout the country.

Jose Viado, reforestation administrator, reported that from January to November 1962 his office replenished most of the areas ravaged by illicit timber operators, kaingineros and squatters.

About 100,000 hectares have been replanted to some 155 million trees as of this month, he said.

However, there are still 1.5 million hectares of barren watersheds that urgently need reforestation, he said.

Viado said his office also needs legal officers to act on the mounting suits that have stymied reforestation work.

In Eastern Visayas alone, about 1,800 legal cases involving reforestation were assigned to one lawyer of the office.

Most of these cases involved illegal occupation of public forests, land registration, malicious mischief or destruction of forests and forest fires.

He recommended the creation of a legal division in the reforestation office to speed up the disposition of cases that hamper the work of the agency.

(*The Sunday Times* — January 6, 1963)

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## FORESTRY BOARD CREATION ASKED

The establishment of a forest industries board to look into faster development in the logging industry yesterday was urged by Jose G. Montilla, president of the Philippine Chamber of Producers and Exporters.

Montilla stated a Forest Industries Board (FIB) should be able to program realistically the industrialization of the logging industry.

The PCPE head, who is also vice-president for Luzon of the Philippine Association of Log Producers and Exporters, stressed that processing among industries is the ultimate objective of those now engaged in logging.

“There should be a way by which the problem of acquiring machinery and equipment for processing, veneer or plywood, can be solved. The FIB can be the agency that can help solve this problem,” he said.

Montilla proposed that it should be a provision of law that will create the FIB to make actual timber stand as loanable fund and that fund so acquired should be used primarily and exclusively for the establishment and operation of wood processing plant.

“To insure that the fund is so used, penalties should be imposed both in imprisonment, fine and confiscation of a firm’s assets,” he said.

He emphasized that penalties should be so stiff it will preclude exploitation of credit for purposes other than establishment of wood processing plants.

Montilla pointed out the FIB can excite activities not only in veneer and plywood manufacture but also such other industries which use wood for raw materials.

“The success along this line would change our export from that of raw materials to finished products,” he said.

(*The Manila Chronicle* — January 16, 1963)

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## LUMBER TRADE NATIONALIZATION GETS SUPPORT

A bill nationalizing the log and lumber industry and creating the Wood Industries Board filed by sized that credit provisions of the bill which, ac-Rep. Vicente Pimentel (L. Surigao del Sur) drew the support of three lumber associations.

Rosauro Dongallo, PCPE 3rd vice-president and chamber spokesman for the lumber industry, said the bill will insure proper utilization and conservation of forest resources.

Other organizations that have supported the bill are the Philippine Federation of Export Producers and the Philippine Association of Log Producers and Exporters.

Jose G. Montilla, PFEP and PCPE president, observed that the creation of a Wood Industries Board will result in the integration of the development of the wood industries of the country.

Pablo Sarmiento, acting PALPE president, emphasizing to him, will speed up industrialization of the logging industry.

Salient provisions of the bill are the following:

1. Filipinization of the logs and lumber industry;
2. Provision of a period within which alien enterprises in logs and lumber shall be liquidated;
3. Extension of credit for development and conservation of forest resources by the Central Bank, Development Bank of the Philippines and the Philippine National Bank, with priority given to licensees and allowing lumber yards, sawmills, or or kiln yards as collaterals;
4. Rediscounting by CB of commercial papers covering loans to insure the maintenance of financial assistance to the lumber industry; and,
5. Provisions on penalty which will discourage dummy practice and bring about forfeiture of rights by any violators of the provisions of the bill.

Dongallo, in urging support of the whole export industries to the bill, said that alien operations through dummies were largely responsible for forest denudation.

“The Wood Industries Board when established will insure, in cooperation with the Bureau of Forestry, the practice of forest management, such as selective logging for conservation, and bring about smooth and rapid industrialization of the industry,” he said.

(*The Sunday Times* — Feb. 10, 1963)

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## SQUATTERS HAMPER RECLAMATION JOBS

Squatters and other illegal occupants are infesting wide areas tagged for forest reclamation by the Reforestation Administration.

Jose Viado, reforestation chief, said the situation is being aggravated by the irregular actions of local officials who tolerate if not authorize the illicit practice of squatters, land speculators, absentee landlords and kaingineros in those areas.

Viado said the Cebu reforestation project has 893 claimants and squatters. The Jalaur reforestation scheme in Iloilo has 303 squatters. The other reforestation projects swarming with squatters and claimants are Loboc, Bohol, 200; Canlaon, Negros Occ. 205; and Danao, Cebu, 140.

Viado explained that these organized settlers are either backed by some powerful politicians or are protected by lawyers. Some of them are fanatic settlers and persons with questionable papers of grant or titles.

Queried on the early solution of the squatters problem, Viado said that with the appointment of four more lawyers to reinforce the agency's original six legal officers, the filing of cases against these squatters and claimants will be speeded up.

Viado deplored the dearth of information materials on forest conservation in the approved textbooks for elementary and secondary education.

He said that except for an essay or two, no topic underscoring the importance of forest conservation and reforestation can be found in Philippine textbooks.

Even books approved for supplementary reading do not carry such much-needed literature, he pointed out.

Considering that the country's present rate of forest destruction is 50,000 hectares a year which is the fastest in the whole world, the public education system should include more topics on forest conservation especially for elementary instruction.

Viado stressed that the gospel of forest conservation should be inculcated into the minds of the young citizens so that they will ultimately have not only love for trees but also the will to resist forest desecrators.

The reforestation administrator suggested that the country's foresters spearhead a forestry information and education campaign via the schools by submitting articles on forest conservation to the department of education for proper evaluation.

*(The Sunday Times — Dec. 16, 1962)*

## LOGGER CALLS FOR STRONGER MARINE FLEET

Pablo S. Sarmiento, executive vice president of the Philippine Chamber of Wood Industries (formerly PALPE) yesterday urged a strong national policy to support the establishment of a strong maritime industry.

Sarmiento stated that any expansion in the export trade will be most profitable and secure with the existence of an adequate national maritime industry.

"At present Philippine exporters are at the mercy of foreign flag lines and shipping cartels. There is urgent need for a national policy supporting a strong maritime industry," he said.

He pointed out that most of the highly industrialized countries of the world depend on a strong maritime setup for the growth and stability of their foreign trade.

"Under its present program, the Philippines can do no less," he said.

Sarmiento stressed that the present Congress in session can actually spell out by legislation a definite and incentive-giving statute on the establishment of the country's maritime industry.

*(The Sunday Times — March 17, 1963)*

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## FORESTRY BUREAU OFFICIAL RETIRES

Forester Gregorio Poblacion of the forestry bureau retired Friday, March 8 after completing 42 years of government service.

He started as a ranger in 1921 and rose to forest supervisor and finally as chief of sawmills and license division. He was also designated acting assistant forestry director.

A native of Mina, Pototan, Iloilo, Poblacion is an alumnus of the UP College of Forestry. He is married to the former Natividad Yllano.

*(The Sunday Times — March 17, 1963)*

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## DM BACKS PULP MILL IN SOUTH

President Macapagal indicated his approval of a plan to set up a pulp factory in Mindanao, as one of the best guarantees for press freedom.

Commenting on reports that Col. Andres Soriano and a group of Mindanao timber concession holders were fighting for the timber concessions applied for by the Soriano firm, the President said that the matter is now with the secretary of agriculture.

However, he added that contrary to reports that the area covered by the Soriano application was

as big as an entire province, the President said the contiguous area applied for was smaller than the entire concessions put together.

The President said that the establishment of a newsprint factory would not only save millions of dollars; it would also help preserve press freedom.

He recalled that the previous administration controlled the importation of newsprint but the licensing was lifted when he took over.

"There is no guarantee," he said, "that future administrations would restore newsprint licensing in order to curtail press freedom."

(*The Sunday Times* — March 17, 1963)

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## HOUSE BODY SETS FORESTRY PROBE

Rep. Vicente Pimentel (L. Surigao), chairman of the House committee on forestry, has said his committee will investigate the indiscriminate issuance of timber licenses, log overcutting and overshipments, alien exploitation of forest concessions through the use of dummies, and unlawful sale of timber licenses.

Pimentel said he has received reports that influential parties have succeeded in getting forest concessions ranging from 10,000 to 30,000 hectares. These areas, however, have not been developed because it was never the intention of these parties to go into active logging operations, he added.

The congressman cited the case of a Davao businessman who, he said, got a 30,000 hectare forest concession in Mindanao two years ago and it has never been exploited. Latest reports say it is for sale for ₱2 million, Pimentel said.

The solon said the laxity of forestry officials in enforcing terms of leases and agreements between concessionaires and their parties have not only cheated the government of revenues but has also jeopardized the interest of legitimate businessmen who would have been able to develop such areas into tax-paying timber resources.

In the case of overcutting, Pimentel said his committee would look into reports of connivance between local concessionaries with Japanese log buyers on one hand and with customs and forestry inspectors on the other. He said this connivance has enabled exporters to salt dollars abroad because of undermeasurements and overcutting.

(*The Sunday Times* — March 17, 1963)

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## MT. DATA MENACED BY SQUATTERS

The reported rampant deforestation and illegal construction of squatter shanties in the Mt. Data

national park reservation in Bontoc, Mt. Province, was bared the other day by the Board of Travel and Tourist Industry.

BTTI officials asked the parks and wildlife commission and the bureau of forestry to curb the destruction of the national park.

Reports reaching the tourist agency said that the reservoir supplying water to the BTTI-owned Mt. Data resthouse and to residential homes in a nearby lumber mill compound had dried up due to wanton forest destruction.

The Mt. Data water storage was installed several years ago by the Heald lumber company of Bontoc for the government resthouse, the area around which is actually a watershed feeding four principal rivers in the north: Abra, Agno, Ambayanan and Chico.

Findings revealed that as a result of the widespread cutting of trees around the watershed, runoff water which follows everytime there is a downpour had been rendered unchecked and could not be piped to the reservoir, thus causing the dry-up.

Affected by the water shortage aside from the resthouse occupants are more than 1000 residents in the nearby Heald lumber mill compound and in the immediate vicinities.

The BTTI had recommended the ejection of squatters and the prosecution of kaingineros in the reservation site so as to safeguard the interest of public welfare.

It was intimated, however, that political intervention is being encountered by the wildlife commission in its drive against the kaingineros and squatters.

The BTTI expressed concern over the threats of "kaingin" to lives and properties of thousands of people in the immediate surrounding towns and provinces in case of overflowing of the four big rivers in the region.

The BTTI's efforts of reforesting and beautifying the park for the benefit of foreign and domestic tourists and vacationists are being hampered by illicit farmers.

Mt. Data park occupies an area of 5,513 square meters along the Benguet-Bontoc boundary and is included among the major projects of the BTTI under its five-year tourist development program. Upon completion, it is expected to boost the income of Mt. Province double its present income.

Deputy Tourist Commissioner Augusto D. Resurreccion, who visited the place the other day disclosed that Mt. Data's water source had already been transferred to a nearby spring to relieve the water shortage.

Ressurreccion urged authorities to intensify their drive against the squatters and kaingineros to prevent other tragic consequences that might arise from their illegal operations.

(*The Sunday Times* — March 17, 1963)

\* \* \*

## ILOCOS NORTE MAYORS ASK RA TO RESTORE PROJECTS

Municipal mayors and other officials of Nueva Era, Banna, and Solsona, Ilocos Norte, yesterday sought the return of the activities of the government's reforestation project in Nueva Era in a move to prevent further erosion of the mountain areas and possible floods in the region caused by the fast disappearing forests.

Rep. Simeon M. Valdez of the second district of Ilocos Norte, wired a request from Brazil, where he attended the annual inter-parliamentary conference, to Administrator Jose Viado of the Reforestation Administration Project of the Philippines to restore to Nueva Era the reforestation project in the interest of the rural people.

Nueva Era, by reason of its natural fauna being a mountainous region, became the "lumber yard" of Ilocos Norte, and logging activities in the region caused its speedy deforestation.

\* \* \*

## ADEVOSO ORDERS NO FOREST CLEARANCE

Officials of the land clearance projects under the EEA-NARRA program have been instructed to clear only areas fit for agricultural and resettlement purposes and to keep intact forest lands.

This was bared by Secretary Adevos, EEA administrator in the opening day of the Luzon district foresters convention held in Manila recently.

Director Pecson said he was for the retention of forest lands for scientific and productive management. The clearing of forests especially in vital watersheds might produce disastrous results, he said.

Adevoso was applauded by the district foresters when he made the announcement. He urged the foresters to rally the people in their respective regions behind the socio-economic program.

\* \* \*

## UTLEG STRESSES MORAL REGENERATION IN FORESTRY

"The obsession of Director Pecson for the restoration of the prestige the Bureau used to enjoy should spur every forestry employee to give his very best in the form of public service."

This was the counsel of assistant director Juan L. Utleg to forestry employees in a party tendered recently in his honor.

Lauding President Macapagal's moral regeneration program, Utleg said any good job performance will avail to nothing if the performer's virtues are highly questionable.

Meanwhile, Forestry Project Coordinator Florencio Asiddao demonstrated a rare gesture of sportsmanship when he publicly pledged his cooperation to Assistant Director Utleg.

\* \* \*

## BF ORGAN REAPPEARS

It's out again!

Shelved for three years, the *Forest Echo* hopes to stay put this time.

The original plan was to put this out in print. However, some financial details have to be threshed out yet.

The *Forest Echo* is the publication of, for and by the forestry employees. Signed write-ups and suggestions from forestry employees will be most welcome.

Criticisms that may not be published for ethical reasons will be brought to the attention of the Director.

Voluntary contributions for the printing of subsequent issues of the BF organ may be sent to the Chief, Administrative Services Division or to the Chief, Forestry Information Section.

\* \* \*

## IN-SERVICE TRAINING

Sr. Training Officer Amado C. Salamatin announced that a training course for forest guard supervisors under the EEA Forest Conservation Program will be held February 11-28, 1963 at Diliman, Quezon City.

\* \* \*

## NEW LAWYERS

Manuel R. Castro of Bugallon, Pangasinan, placed seventh in the 1962 bar exam.

A consistent UP College of Law scholar, Castro works in a Legal Division. He obtained a rating of 86%.

The new lawyers aside from Castro are Abednigo Adre, Francisco Jatulan, Alfredo Pineda and Andres C. Garalza, Jr.

At the suggestion of Director Pecson, the new forestry members of the bar were honored at a downtown restaurant recently. All honorees except Garalza who is detailed in the Information Section are with the Legal Division.

Director and Mrs. Pecson distributed gifts to the honorees.

## EMPLOYEE'S LOG BOOK

Every forestry employee has now a log book of his own showing the different tasks assigned to him from time to time by his superior and the corresponding action taken on each specific job.

This requirement is in line with Director Pecson's desire for speedy action on the part of employees on all cases brought to them for disposition.

Correspondence of any kind, Director Pecson reiterated, should be acted upon within 72 hours from receipt. He said this objective can not be realized unless a well supervised distribution and inspection of work performed by every employee is frequently pursued in every division.

With the use of a log book, an employee may be able to appreciate every job given him and can determine which of the different tasks should be given priority.

The requirement embodied in Forestry Circular No. 313 was recommended by Management Analyst Godofredo Y Gulane.

\* \* \*

By DELIA H. IBARRA

To new faces around — hi and welcome — to old mugs still in abundance — pleased to meet you again . . . your writer's back to sniffing once more for something to make a column by, something to hold your gaze by, I hope.

They say there's fire in young blood... the grinning attorney, MANUEL CASTRO, upped it to 7th place in the last bar! Paging the new batch of barristers; Atty. CASTRO, Atty. JATULAN, Atty. ADRE, Atty. PINEDA, Atty. GARALZA — to them, leis of praises.

Applause for Miss IRENE FLORENDA! — without whose efforts as DANRLA president, Bureau Chapter, there would not have been recognition of the women group, accomplished along social and moral aspects . . . she mixed charms with charity, now the girls feel harp music in their hearts.

Commendable is the word for the renovation being undergone by the Budget and Fiscal Division. Boss CECILIO DIEGOR's office certainly deserves watching, and more kudos.

Speaking of hearts, love, beauty galore, Miss BEATRIZ PUJOL is a standout. By way of compliment, smokers say "you're like my brandsweet, mild and my, you do satisfy! Blue seal, aye, aye." Composite Valentine inspiration: angelic face of CORAZON MAÑO; whistle-bait chassis of AU-

RORA FLORES; fairy-tale complexion of FELICITAS SANTIAGO; honeyed voice of ADORACION REYES; queenly height of TESSIE CIA; gay gait of REMEDIOS FELIX. (Tip: they are all cute packs, gentlemen... snare 'em but love 'em well).

\* \* \*

## TWO FORESTERS RETIRE

Juan D. Daproza assistant forestry research division chief, and Pablo Umadhay, both of the bureau of forestry retired this week after 44 years in the government service.

They received citations from Director Mateo S. Pecson.

Daproza started his public career as temporary ranger in 1919. Through merit and hard work, he rose to the positions of ranger, forest supervisor, assistant forester, forester, research division chief.

A native of Sta. Maria, Ilocos Sur, Daproza finished his ranger's certificate in the UP school of forestry in 1919 as government pensionado. He obtained his BSF and MSF in 1924 and 1925, respectively, from the University of Montana, USA. (*The Sunday Times* — Feb. 10, 1963)

\* \* \*

## PARKS AND WILDLIFE OFFICE PUTS OUT BULLETIN

In line with its program of keeping the public informed on the events, activities and important happenings at the Parks and Wildlife Office, the Public Information and Education Service of the office has put out a quarterly publication for the consumption of PWO personnel and the public.

The need for this kind of publication has long been felt by the Parks and Wildlife Office to help boost the tourist industry and make known locally and abroad what the Philippines has to offer the tourists. The PWO Bulletin came out last January.

The PWO Bulletin will serve as an avenue to facilitate the flow of parks and wildlife information and as a forum where the problems on parks and wildlife can be discussed openly and eventually arouse public interest in parks and wildlife conservation.

At the same time, the Parks and Wildlife Office ordered the printing of tourist guide brochures containing the complete list of national parks in the Philippines, showing their location, features, areas, accessibility, and facilities for the information of tourists.



# Sunshine Corner

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## DESTRUCTIVE ORDERS

Professor (lecturing): The most destructive insect pests are of the family Lepidoptera. You (pointing to a sleepy student who was startled), name other orders which members are also destructive.

Student (absentmindedly): Sir, the orders are Corruptera, Graftera, and Percentera.

(Contributed by Tomas M. Binua)

## NEGLECTED SUBJECT

A married forestry student in Wood Technology was seriously examining his boxful of wood specimens with his lens in preparation for his examination the following day when his wife who apparently has not had a sleep yet although it was already very late in the night, came in, stood with arms akimbo in front of her husband and said half-seriously:

“What about me, Carlos, are you no longer serious about me?”

(Contributed by E. S. Padre)

## EXPERT DENDROLOGIST

Freshie: How good are you in Dendrology?

Senior: Even if you burn your specimens, I can identify them by the ashes only.

Freshie: Really?

Senior: Sure, but leave the tags.

(Contributed by Jose A. Rayos)

## ASSISTANT NEEDED

While a worried old and returning forestry student was trying his best to finish studying all his voluminous lessons before the last of his final examinations, he noticed his wife busy scanning over the society page of a newspaper. Turning to his behalf, he said: “Darling, do you love me?”

“Of course, dear, I do,” mirthfully answered the wife.

“You promise to share with me all the happiness as well as difficulties and worries of life, Honey?”

“Sure.”

“If so, please, Darling, help me memorize my lessons so that I can pass my examination.”

(Contributed by Carlos L. Wandisan)

## ELIGIBILITY

A newly-wed couple was relaxing one evening when the husband confessed to his young wife: “Honey, you know I have three eligibilities. One is my forest guard civil service eligibility another is my senior forester civil service eligibility and the third has but recently expired.”

Wife (anxiously): “Oh, tell me what has expired, dear.”

Husband: “My eligibility to marry.”

(Contributed by E. S. Padre)

## WHEN THE MAHOGANY LEAVES FALL

A graduating forestry student and his sweetheart, also a forestry student but not yet graduating, were having their love tryst under the mahogany trees on the campus one late afternoon when the former said: “Oh, dear, how it makes me terribly happy to be with you, to be near you!” Then shifting his glance at the mahogany leaves falling, he observed nostalgically, “When the mahogany leaves fall, it is graduation time...”

“Oh, how I wish they should not fall yet...” feebly murmured his young Juliet.

“Why so, my dear?” the young Romeo was startled from his reverie.

“For one thing sure you’d be leaving me if they do.”

(Anonymous)

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# FORESTRY LEAVES

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## Editorials:

### **Moving Up To A Greater Challenge**

Our graduates will fill vital positions in the government as well as in private industries and they will greatly contribute to the country's industrial progress. In a nobler sense, they will play the major role of frontline soldiers in the constant battle for forest conservation.

While seeking the most promising job, these graduates will weigh and re-weigh the opportunities in each position. Nevertheless, in the deliberation on which job to take, it is of prime importance that they should first resort to self-assessment. For although their technical training may be adequate to be beyond question, they should examine whether or not they have acquired the sterling qualities of professional integrity, dedication to work, imaginativeness, and tolerance. Indeed, the ideal university atmosphere to which they have been exposed—affording them as it did—the chance to imbibe such traits, will enhance the value of their technical education. Those noteworthy personal attributes will serve them in good stead as stewards of our precious forest resources. And to a large extent, those will determine success in their chosen profession.

As these new foresters eagerly stride out of campus, they are faced with the test to their technical competence. However, side by side with that test is the greater challenge of being able to maintain those personal qualities which mark the true filipino forester.—O.A.G.

# Don't Neglect This Guaranteed Freedom

A strong public opinion invariably tempers, if it does not entirely change our leaders' decision. As university students, we know this well. We have come across instances wherein students' views are considered in regard to matters affecting us: a recent request by Congressman Rodolfo Ganzon for UP students' opinions on the Spanish Law and the proposed bill reducing the voting age from 21 to 18 years is one instance. The Faculty-Students-Administration conference on faculty-students relations is another instance of a free and frank interchange of ideas.

Honestly expressed, intelligent opinions are essential to good citizenship. They show awareness of current issues, nay, deep concern and spirited reaction over them.

It is a source of pride and distinction that within the university there is an almost unlimited opportunity to speak out one's mind. For this is a freedom that students of other campuses do not seem to enjoy, as evidenced by cases of suspension of student publications which printed certain views that did not suit the taste of the school's authorities. Nevertheless, we cannot be less pretentious than when we bask in the belief that the same singular atmosphere pervades the College of Forestry campus. Here, we should admit the sobering fact that what we believe as vigorous views are nothing but a sedate, penurious flame amidst the gusty welter of the many school problems. Occasionally, it is fanned up when some students bring out their spur-of-the-moment ideas in Student Body Organization meetings, write a few comments in the *Forestry Leaves* or *Leaflets*, or at most, call at the Dean's office in Barong Tagalog to air gripe over the allegedly terrifying try of a professor to postpone their graduation to another semester.

But a truly strong student opinion canuous, energetic flow of views from among us, "sounding outs." There has to be a continuous, energetic flow of views from among us if we are to hope for any concomitant effect. And were we to realize that such an effect of freely expounding our ideas redound to our general welfare, should we remain hesitant to voice out our opinions?

The College is still in its formative years. Its program of improvement and expansion is still in the initial stage. Now, therefore, is the most propitious time for us to take part in framing its policies so that its growth may generate the maximum of enduring benefits not only to us but to future forestry students. A cross-section of student ideas on school rules and regulations, on the grading system, on the method of instruction, on the formulation of curricula, on holding co-curricular activities, on providing books and laboratory equipment, etc., will in many ways help the administration reach sensible and workable solutions. We strongly believe that the pertinent comments and suggestions, which certain quarters might misconstrue as obstructing the course of action taken by our policy-makers, would serve as guideposts to our school officials in the back-breaking task of solving the problems that have perennially vexed our truly venerable institution.—*O.A.G.*

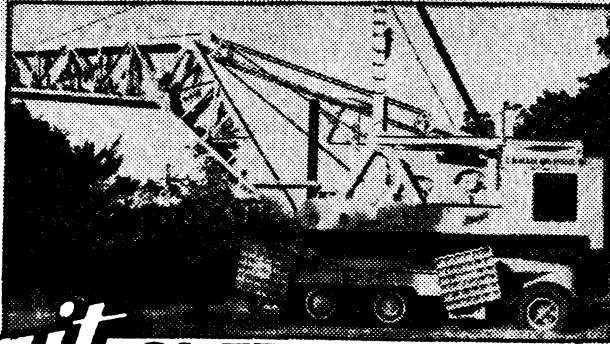
# ERRATA

Front page, lower right hand corner — Vol. XLV No. 3 should read  
Vol. XIV No. 3

Inside front cover — The title TEN GREAT VERRBS OF LIFE should read  
TEN GREAT VERBS OF LIFE

Page 70, fourth paragraph, the first sentence should read — But a truly strong student opinion can hardly be characterized by such sporadic “sounding outs”.

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