A Forestry Formula Devised by The GSRC

By Teofilo A. Santos Forester, Bureau of Forestry

Forestry is defined as "the scientific management of forests for the continuous production of goods and services". It is also defined as the science, art and business of managing forests in continuity for forest purposes.

Among other things, Republic Act No. 997, as amended by Republic Act No. 1241, authorized the Government Survey and Reorganization Commission (GSRC), to do the following:

- (a) "to group, coordinate or consolidate departments, bureaus, offices, agencies, instrumentalities and functions of government;"
- (b) "to abolish departments, offices, agencies or functions which may not be necessary or create those which may be necessary for the efficient conduct of the government service, activities and functions;"
- (c) "to eliminate overlapping and duplication of services, activities and functions of the government;"
- (d) "to transfer functions, appropriations, equipments, property, records, and personnel, from one department, bureau, office, agency, or instrumentality to another:"
- (e) "to create, classify, combine, split or abolish positions;" and
- (f) "to do whatever is necessary and desirable to effect economy and promote efficiency in the government."

As a result of such painstaking survey of the GSRC the NEW LOOK for the Bureau of Forestry, one of the bureaus under the Department of Agriculture and Natural Resources, as envisioned in this reorganization plan, is hereby presented, as would a painting on canvass be presented in a beautiful picture frame. The report has been forwarded to the President of the Philippines on February 14, 1956, and the President has in turn submitted it in full to Congress, which is now in session.*

This report includes Reorganization Plans Nos. 30-A and 77 of the Task Force on Agriculture and Natural Resources headed by the Honorable Isidro C. Kintanar as chairman with the Honorable Jose C. Locsin and Honorable Paulino Alonzo as members.

Reorganization Plan No. 30-A deals with the survey and report of the entire Department of Agriculture and Natural Resources, together with all the bureaus, offices, agencies, and functions under it. Plan No. 77 provides for the establishment of a Forest Products Research Institute, which will absorb some of the functions of the Bureau of Forestry and the Forest Products Laboratory and will centralize all forest products research work.

The writer believes that the two plans are both extensive and exhaustive and are self-explanatory. Hence they are presented here in full and watch for its implementation.

BUREAU OF FORESTRY

RECOMMENDATION ON GENERAL POLICY

 Secure Executive approval to long-range policies on conservation and use of the public domain. Public domain once

^{*} This report was one of the 33 plans approved by Congress.

declared permanent forest land should be withdrawn only for a serious national emergency and by an Act of Congress.

- 2. Institute a sustained program of public information designed to create understanding of the functions and services of the public domain.
- 3. Initiate a stumpage appraisal system based on the logging cost, market conditions, and the accessibility of logging operations to shipping points. Provide for the sale of timber to the highest bidder who meets the stipulatetd qualifications.
- 4. Provide for more effective utilization of technical personnel and for in-service training.
- 5. Develop an integrated code for all forest and public domain management legislation.
- Concentrate on conservation and sustained yield programs rather than income activities.
- 7. Review reforestation program.

RECOMMENDATIONS ON REORGANIZATION

- Abolish the Commission on Parks and Wildlife. Create a Parks and Wildlife Office in the Department.
- 2. Delegate authority to the Director who in turn should delegate authority to subordinate key officials of the Bureau.
- 3. Create a position of Assistant Director.

 Create an Office of the Director.
- 4. Reorganize the Bureau on a line and staff basis.
- 5. Reduce workload on paper processing.
- Increase funds available for the purchase, replacement, repair, and maintenance of equipment.

Forest Products Research Institute RECOMMENDATIONS ON REORGANIZATION

- 1. Create a Forest Products Research Institute.
- 2. Create a Forest Products Research Fund. COMMENTS

Our remaining public lands, forested and clear, constitute one of the nation's most valuable resources. As a crop, the forest offers a continuing yield of lumber and its by-products. As land cover, the forest and grasses protect the precious top layer of soil from the ravages of erosion. As plant life, the forest and grasses deposit organic matter upon the soil, protect the watershed from erosion, and regulate runoff.

Our forest reserves and land resources are not inexhaustible. It appears that we may have already consumed our forests below the safe minimum necessary for the continued well-being of the country and the maintenance of a vigorous timber industry. We have also settled areas unsuitable for such use and washed valuable lands into the sea.

The destruction of forest areas through desolation timbering, the yet unchecked practice of kaiñgin; a lack of understanding of the advantages and benefits of sustained yield timbering; and the dedication of unsuitable public lands for settlement have created increasingly harmful effects upon our public domain and our remaining forest reserves.

Our nation must give greater attention to the conservation of the existing forest resources through wise utilization, public domain designation, and protection against encroachment; reforestation of the denuded and open areas; enlightened grazing practices; and widespread application of the sustained yield principle. In addition, a better distribution of timbering benefits from forest reserves as between concessionaires and government should be developed. The benefits of timber sales should more nearly relate to preserving the resource capital which produces the income.

It is believed that the wise management of our forest is to be found on four fronts: full legislative acceptance or responsibility to provide additional national income for the conservation of our forest; executive resistance to the demands for opening public lands ill-suited to cultivation or essential for forest purposes; a growing awareness by the public of the value and significance of forests to their present and future well-being; and finally the development of governmental organization competent and capable of carrying out a national program of public domain conservation and development. This portion of the Plan and Report deals primarily with the fourth front. But it is interwoven with assumption that the Congress will accept its responsibility, belief that the Executive will move towards a program of balance use of the public lands, and faith that the public will become aware of the value of the public domain to their well-being.

The Bureau also bears a grave responsibility in the first three fronts, for it is the entity closet to the problem, most aware of the needs for changes in policy and programs, and best able to formulate them in understandable forms. The Bureau has not yet met these responsibilities. The proposed reorganization has been designed to move the Bureau closer to a realization of these basic purposes and objectives.

RECOMMENDATIONS ON GENERAL POLICY

 Secure Executive approval to long-range policies on conservation and use of the public domain. Public domain once declared permanent forest land should be withdrawn only for a serious national emergency and by an Act of Congress.

The Bureau of Forestry is handicapped by a lack of clearcut policy on the use and conservation of the public domain and its forest products. Such policies will undoubtedly change as public opinion, legislative enactments, and economic conditions change. The need, however, is not so much for unchanging policies as for authentic statements of what the government's policies are at a given moment. Program formulation and execution both require a firm-

ly stated policy base. Examples of the need for such policy definition include:

(1) the types and conditions which shall govern the designation of public domain as inviolate forest reserves;

(2) the deadline for completing the primary designation of public lands;

(3) the deadline for conversion of timber concessions to sustained yield basis and conditions under which it shall occur;

(4) the conditions under which the sustained yield policy shall govern administration of concessions; and (5) the place and objectives of reforestation programs.

Efficient, effective operations are almost impossible without definition of such policy. Actions are tentative, referrals of specific problems to higher authority occur too frequently, and higher authority interference in specific actions of the Bureau precludes or unreasonably delays dispatch of otherwise routine workload.

The Bureau is also hampered in the performance of its mission by vacillating implementation of accepted policy by higher authority. Polices are ignored by specific decisions, exceptions are made without reference to general trends, constant factors, or justifying circumstance capable of definition. Local political pressures are to often permitted to exercise great influence in the reopening of public lands; the result is a constant attrition of the permanent forest without policy or knowledge of results.

Lands declared permanent forest land should be given greater security of status. The policy and legislation should stipulate that once so declared, permanent forest land cannot be withdrawn except for a serious national emergency and then only by an Act of Congress. Legislation effecting the withdrawal of delegation should be passed by Congress.

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2. Institute a sustained program of public information designed to create understanding of the functions and services of the public domain.

The wise use and conservation of public domain is of interest to all citizens. Their understanding and support of wise land-use policies is essential for acceptance of Bureau programs. The Bureau has done little to create this awareness. There is little understanding that such a program is necessary or desirable. Without it, inadequate appropriations reflecting public indifference will continue, the programs announced will fall short of achievements. The need is for a well-developed sustained program of scientific, factual information about the public domain and its place in the economic and recreational future of the nation.

3. Initiate a stumpage appraisal system based on the logging cost, market conditions, and the accessibility of logging operations to shipping points. Provide for the sale of timber to the highest bidder who meets the stipulated qualifications.

A stumpage appraisal system will benefit both the industry and the government. The industry will pay a fair value for the standing timber in relation to the cost of logging operations or conversion. On the other hand, a sound stumpage appraisal will bolster the revenues of the government and result in increased benefits to the people as a whole. A fixed price for timber not related to stand and terrain is no longer justified.

At the present time, forest charges are fixed by law and are applied without regard to such factors as cost of logging operations, the conditions of the market, and the accessibility of shipping points. Bidding for forest concessions is now handled in terms of qualifications of the bidders. The price

is fixed by type of timber. This practice tends to encourage optimistic statements of capacity and financial status of the bidders. It also makes difficult the evaluation of the relative competency of the bidders. The stumpage appraisal system would encourage present and prospective concessionaires to conduct their operations in different areas regardless of topography and proximity to transportation facilities. Price bidding will insure greater returns to the government and will relate the commercial value of harvestable timber more nearly to the payments made to the government.

4. Provide for more effective utilization of technical personnel and for in-service training.

The government lacks well-trained technical personnel. While the Bureau suffers from lack of forestry technicians, it has not effectively utilized its available technical personnel. In many cases, the time of forestry technicians are devoted to clerical and administrative matters. Work done by one forester is repeatedly done as it progresses "up the line." This arrangement dissipates the very limited technical skills of the Bureau. In part, this condition arises from an exaggerated concept of what trained foresters can do, in part to a too limited notion as to what administrative personnel can do, in part to the stringent limitation of adequate administrative items in the budget, and in part to a simple lack of understanding of what is involved in delegating authority and assigning responsibility.

A program of personnel training should be launched by the Bureau. Personnel training includes training for forestry work as well as for mangement improvement. The Bureau should continue the in-service training program it has recently started. The Bureau should also avail of the facilities and

services of educational and training institutes such as the Institute of Public Administration and take full advantage of scholarships and fellowships offered by international organizations. In addition, the Bureau should systematically study the work of its foresters and eliminate the administrative work in their assignments wherever possible. Finally, there should be complete elimination of the "checking through redoing" practices. Supervision is best achieved through coordination and instruction prior to work performance not by detailed review and redoing.

5. Develop an integrated code for all forest and public domain-management legislation.

The present laws which govern the management and disposition of public domain as well as the management of the permanent forest lands are many, complex, and often contradictory. The Bureau's operations are consequently hampered and delayed. There is an urgent requirement for codifying these laws, coordinating their intent, and unifying their directives.

6. Concentrate on conservation and sustained yields programs rather than income activities.

Certain factors center the attention of the Bureau on income making activity which impair the achievement of their major purposes, the willingness of Congress to grant substantial appropriations for income-producing entities and the attitude of governmental officials that efficiency is primarily based on the income they produce for a given fiscal year.

There is a concentration of efforts on income-making activities to the neglect of the Bureau's conservation and sustained yield programs. Appropriations should be principally based on programs and accomplishments relating to the major purposes for which the entity is

established not on income which is derived primarily from capital depletion.

7. Review Reforestation Program.

The functions of the Reclamation and Reforestation Division are reflected in its title. However, serious review of its programs should be undertaken. At the present tempo of reforestation it will require about 20 centuries to complete the areas designated for reforestation. This program should be made the focus of a technical committee chaired by a representative of the Congress. The Committee should evaluate the practical problems confronting this program, the possibility of extending private reforestation, the feasibility of a greater concentration of the Division's limited resources to highly selective areas, and the use of unemployed citizens for such work.

RECOMMENDATIONS ON REORGANIZATION

- Abolish the Commission on Parks and Wildlife. Create a Parks and Wildlife Office in the Department.
 - a. Transfer all the functions, appropriations, property, equipment, and records, and such personnel as may be necessary, of the Commission on Parks and Wildlife, to the new office.
 - b. Attach the new Office to the Bureau of Forestry for policy, program coordination, and administrative supervision. Designate the head of the Office as Chief.
 - c. Create a Parks and Wildlife Committee to serve as an advisory body to the Secretary on Parks and Wildlife matters. The Committee should comprise the Director of Forestry (chairman), the Director of Parks and Wildlife, and one representative each from the Department of Education, Social Welfare Administration, Department of Public Works and Communications, and National Planning Commission.

The members of the Commission on Parks and Wildlife are the Secretaries of Agriculture and Natural Resources, Public Works and Communications, Health, and Education, and the Administrator of the Social Welfare Administration. It is charged with planning, conserving, and maintaining national parks, game refugees, bird sanctuaries, and national monuments. Its area of activity is carried on primarily within the public domain. It has personnel located in field areas where the Bureau of Forestry has jurisdiction and responsibilities. national monuments functions are related to the cultural and educational activities of the nation. The Commission form of organization is ill-suited for the administration of an operating program. There is need to bring the various interests in parks and wildlife together in the development of long range policies and programs. An advisory Committee will provide this perspective. The function has no justification for remaining in the Office of the President.

- Delegate authority to the Director, who in turn should delegate authority to subordinate key officials of the Bureau.
 - a. Provide initially for delegation of authority to the Director to issue the following licenses and/or lease agreements or their renewals:
 - Timber licenses involving 10,000 cubic meters or less, or embracing 10,000 hectares or less.
 - 2) Pasture lease agreements embracing not more than 1,000 hectares.
 - Tree farm lease agreements embracing not more than 500 hectares.
 - Saltworks and other special landuse agreements covering a period of not more than ten (10) years.
 - b. Provide initially and upon a selective basis for the delegation of authority to district foresters, to issue the following licenses and/or permits:
 - Renewals of ordinary timber licenses covering a period of one
 year for 500 cubic meters or

- less, or embracing less than 1,000 hectares.
- 2 Ordinary minor forest products licenses except for minor forest products which need to be advertised for applications.
- Renewal of all minor forest products licenses.
- 4) Private gratuitous licenses to cut timber for personal use.
- 5) Public gratuitous licenses up to 500 cubic meters of timber.
- 6) Annual tree farm permits up to ten (10) hectares or their renewal.
- 7) Pasture permits up to 100 hectares or their renewal.
- 8) Other special use permits up to 24 hectares or their renewal.

The Bureau Director should exercise only authority delegated by the Secretary. Efficient operation dictates that there be maximum delegation to the Director. These delegations will provide the Bureau the authority it requires for effective, efficient operation.

Delegations outline are those which the Secretary should initially delegate to the Director, and are intended to eliminate much of the paper work in the Office of the Secretary. Subsequent delegations may be made as the Bureau provides evidence of its competence to handle such authority. Policies governing the exercise of the delegations should be developed.

The director should, in turn, delegate certain authority to the district foresters. Lack of delegation has contributed measureably to a very large backlog on permit and license applications. As of July 1, 1955, there were pending 47,044 various land uses applications and 1,443 applications for permits and licenses.

Delegations to the field should be made by the Director on a selective basis depending upon the technical competence of fieldmen and the factors and pressures obtaining in any district office. There also needs to be delegations of authority by the Director to his division chiefs to sign papers of a routine nature within their respective technical fields. This program should also be coordinated with the procedural simplification mentioned elsewhere in this Report. In fact, delegations can be made in some instances only after such simplifications. In other instances simplification is possible only when there is additional delegation. All delegations of course should be provided a framework of policy and criteria in terms of which it should be exercised.

3. Create a position of Assistant Director, Create an Office of the Director.

There is no immediate person or official upon whom the Bureau Director can rely to assist him in directing the Bureau's operations or to act in his absence. An assistant director will relieve the Director of much responsibility for the administration and coordination of the staff divisions of the Bureau, provide a person to act in his absence, and assist in field operations coordination. The Office should comprise the Director, the Assistant Director, and such supportive staff as authorized. It should be responsible for executive supervision.

4. Reorganize the Bureau on a line and staff basis.

The Bureau of Forestry suffers from over-centralization. There is no distinction between staff and line responsibilities. Each division carries on its own field operations, dealing directly with the affected field personnel. The reorganization of the Bureau as proposed below is designed to achieve a detailed internal reorganization of the Bureau on a line and staff basis; a strengthening and reorganization of the staff activities in the Bureau's central offices along major functional lines; the devolution of authority to district offices; and the strengthening of district offices to reflect a bureau perspective in the field. The following organizational changes are recommended:

a. Regroup and integrate staff services along major functional lines.

The organization of the Bureau's staff offices should reflect the major functions of the Bureau which are; delimitation and classification of the public domain into alienable or inalienable lands; reforestation of denuded or cogon areas in order to make a balance of forest cover; management of public commercial forests to maintain a sustained yield; regulation of use and occupancy of forest lands; improvement through research and experimentation of the breed of trees and large plants that thrive in the forest; and issuance of licenses and permits for the extraction of forest pro-The present organization does not facilitate the performance of these functions. There is confusion in functional assignments and common supervision over unlike activities.

The Bureau should be divided into seven divisions: Forest Management, Sawmills and Licenses, Forest Research, Domain Use, Reclamation and Reforestation, Forest Land Uses, and Administrative Services.

- b. Rename the Administrative Division, the Administrative Services Division, and provide the following branches:
 - Personnel Management responsible for matters pertaining to employment, training, investigation of personnel; and other activities relating to personnel administration.
 - 2) Budget and Finance responsible for the preparation of program schedules, budget estimates, and justification requests, cash disbursements activities, statistical control, liaison with the accounts unit of the Budget Commission, such accounting work as is delegated, and other related activities.
 - 3) Legal responsible for rendering legal advice to the Bureau Director and to the division chiefs, the preparation of legal documents, amendatory legislation, comments on legislation affecting the Bureau

of Forestry, and other related matters.

- Forestry Information responsible for conducting a public relations programs, the dissemination of forestry information, liaison with the Agricultural Information Division, and other related matters.
- 5) Property and General Services responsible for the procurement, custody, and maintenance of the Bureau's property, supplies, and equipment; the maintenance of adequate janitorial and messengerial services; central typing pool; certification and checking of records; receiving and dispatching mail; providing security of Bureau building; and other related matters.

The present Administrative Division does not carry its appropriate share of the Bureau's workload. Property and records are ends in themselves rather than management controls. Personnel management is a clerical function. Budgeting and program scheduling rest too heavily upon the Director and division chiefs. Field requisition for procurement, changes on fund allocation, and related matters are held unjustifiably long in the Bureau offices. Messengers, typing, and related services can benefit from additional centralization. Availability and maintenance of field equipment is deplorably low and unsatisfactory. There is no specific entity responsible for the preparation of appropriation requests and justifications, and relating budget to Forestry information has programs. not been effective, and requires greater emphasis on and a broader conception of what is to be done or required. Legal services are mixed up with personnel management functions.

c. Abolish the Inspection Service. Trans-

fer its investigation of personnel irregularities and misconduct functions to the proposed Personnel Management Branch of the Administrative Services Division, and transfer its field inspection functions to appropriate divisions.

Personnel activities are being undertaken by both the Inspection Service and Administrative Division. The evaluation of field activities is separated from the functionally responsible divisions. Division personnel do not have sufficient funds for field visits while the Inspection Service performs field evaluation and correction work. Assignments from PCAC are handled centrally rather than by the division responsible for the activity in question.

d. Abolish the Division of Forest Concessions and Sawmills. Create a Sawmills and Licenses Division. Transfer all functions of the abolished entity to the new Division except timber licensing functions which should be transferred to the Forest Management Division, together with applicable appropriations, property, equipment, and records, and such personnel as may be necessary.

Much of the work of the Forest Concessions and Sawmills Division pertaining to minor forest products licenses, issuance of sawmills permits, and lumber inspections involves paper processing. It is proposed that this paper work be performed by the new Division. It should not be mixed with the timber management functions of the Forest Management Division which is a major function involving evaluation and consideration of policy and administrative factors as well as the granting of timber concessions. As of September 2, 1955, the Concessions and Sawmills Division has a backlog of 1,453 permits and licenses to be issued. A significant portion of this paper processing should eventually be transferred to district foresters when the recommendations on delegations of authority are implemented, thereby reducing the workload of the New Division. The Sawmills and Licenses Division should supervise sawmill operators, and inspect and scale lumber for collection of forest charges and The Forest Management other fees. Division should continue to bear responsibility for managing the public domain, developing means for sustained yield timbering, granting of timber and grazing concessions, and evolving the necessary policies and standards required for protection of the public interest.

e. Extend the functions of the Forest Management Division. Transfer to it the timber licensing functions of the Division of Forest Concessions and Sawmills together with applicable appropriations, property, equipment, and records, and such personnel as may be necessary.

Forest management is a broad actitivity which includes management of the public land resources, the issuance of timber licenses in commercial forests, evaluation and issuance of grazing licenses, and the establishment and administration of forest reserves. The modification proposed for this Division will focus concentrated attention to the need for wise use and exploitation of an estimated aggregate of 460 billion board feet of timber stand within the public forest as well as the use of reserved public domain. It will also enable the Bureau to prepare and enforce management working plans for areas under license. The Division will also handle the issuance of agreements and licenses for cutting timber and of grazing permits, and the supervision over licensees or concessionnaires in their operations. Timber and grazing licensing functions are intimately related to forest management and should therefore go with the Forest Management Division.

f. Abolish the Forest Investigation Division. Create a Forest Research Division and transfer to it all the functions of the abolished Division, except those of the Forest Products Research Section which should be transferred to the proposed Research Institute. Transfer the administration of forest experiment stations to the Forest Research Division.

The Forest Investigation Division performs research functions now also being undertaken by experiment stations under the direct management and supervision of a chief of forest experiment stations. The integration of these activities into a Forest Research Division will eliminate this overlapping of activity.

g. Rename the Division of Forest Lands and Maps, the Forest Land Uses Division.

The change is necessary since the preparation of maps is now being done in the Land Classification Division.

h. Rename the Land Classification Division, the Domain Use Division.

Land classification is more often used for studies to designate the types of soils occuring in a given area and their adaptability to various uses. The work of this Division is to establish that portion of the public domain which should be placed in inalienable permanent forest reserve and that which should be available under varying conditions for settlement or other uses. The change in title will more nearly reflect this basic function. It will also tend to avoid suggestion of duplication with the land classification work of the Bureau of Soils.

- 5. Reduce workload on paper processing.
 - a. Establish a program of procedural an-

alysis, work simplification, and forms control designed to standardize methods and procedures, reduce delay, and eliminate backlog.

The license, concession, and related granting of use rights to the public domain entail a heavy and continuing volume of paper processing which will increase with passing years. This work is not being handled in a current fashion nor in the most efficient fashion. Backlogs are large and increasing. Delays in reply to field submissions of requests for use rights are routine and have a serious effects upon the Bureau's public relations and enforcement ability. Renewals of routine annual concessions are never issued on time. Important renewals of concessions are often a quarter behind with the concessionaires faced with the alternatives of operating illegally or deoperations with resulting ferring costly layoffs. In part, decentralization of authority will resolve this problem, but a great part yield to nothing but costly increases in staff or a reduction in the time and effort required to process the necessary papers. There is evidence to support that the current workload can be handled with the present staff if a thorough study were made of procedures, methods, and forms used. Assistance will undoubtedly be required for this work, but the benefits from a well-conceived selfanalysis program, possibly spear-headed by the Assistant Director, would produce sizeable rewards.

b. Attempt to secure external assistance in the evaluation of current administrative methods for handling paper.

The Bureau should develop further the statistics on paper workload now handled by the central office to establish its size and significance as well as to indicate the backlog. On its completion, the Director should explore the possibility of securing help from: The Department; Budget Commission; Congressional appropriations to resolve the backlog through increased staff, or through employment of personnel specifically trained in the study of such matters.

c. Establish and currently maintain a Manual System for the promulgation of all general orders, delegations, instructions, standards, and criteria.

A major weakness of the present administrative system in the Bureau is the lack of standard operating procedures or written manuals. manual is essential to any entity with field offices. Delegations of authority must be accompanied with instructions on its use. Changes in policy and practice must be systematically transmitted to all employees. The Bureau of Forestry has a manual which has not been revised or made current since its publication in 1932. This manual should be revised to reflect modern communication practices and made to incorporate present procedures and the results of procedural and work simplication studies. should define the authority delegated to subordinate officials, the policies and criteria for operation, and the procedures and method to be followed by subordinate personnel in the performance of their functions. Procedures for its preparation should be defined. Responsibility for maintaining the manual current should be assigned to the chief of the Administrative Services Division.

6. Increase funds available for the purchase, replacement, repair, and maintenance of equipment.

One of the major obstructions to the performance of Bureau activities in the field is the inadequacy of appropriations for the acquisition of equipment and for its adequate maintenance and replacement. For example, Provincial Forest District No. 43 does not have a single motor vehicle. Yet its employees are required to inspect major timber concessions and police vast public forest reserves. In other districts vehicles were observed to be unusued for long periods pending availability of excessively limited maintenance funds. Because of unavailability of such vehicles the personnel were idle.

Forest Products Research Institute COMMENTS

The effective utilization of our forest products is an essential aspect of our economic development. It is therefore necessary that vigorous and extensive research and development programs be instituted to improve techniques and methods in wood production and utilization, increase efficiency, duce waste, and develop new forest products industries. The Commission believes that a semi-autonomous entity in the University of the Philippines free from routine procedures and controls is best for the implementation of this program. The proposal below for a Forest Products Research Institute will not involve additional appropriations since this entity will be equipped with facilities and resources currently available in the Forest Products Laboratory and Forest Products Research Section of the Bureau of Forestry.

RECOMMENDATIONS ON REORGANIZATION

- 1. Create a Forest Products Research Institute.
 - a. Abolish the Forest Products Laboratory (Counterpart Project No. 474) and the Forest Products Research Section of the Forest Investigation Division; transfer their functions, appropriations, personnel, property, equipment, and records to the proposed Forest Products Research Institute, together with such personnel as may be necessary.

The forest products industries, including logging, lumber production, veneer and plywood manufacture, furniture manufacture, and the production of the great variety of lesser products and by-products constitute one of our major sources of income, besides providing means of livelihood for a considerable portion of our population. Such industries are also important in the internal economy of the country, supplying much of our needs for structural materials, furniture, resins, paint oils, firewood, and other products.

The present methods of harvesting timber, producing lumber and plywood, and manufacturing wood products waste from 2/3 to 3/4 of the wood that grows on the land. This is not willful waste but results from wasteful methods used by the industry as well as the inability to find profitable use for what is now considered waste. This waste constitutes an enormous economic loss to the nation. There is therefore a clear need for an aggressive research and development program to improve techniques and methods in harvesting and production. to find new and improved uses for wood and its by-products, and to develop new industries and processes to obtain the maximum utilization of timber.

The volume of research needed in forest products industries is too great and the need for it is too urgent to preclude such research being made part of the work of an institution engaged in a wide field of reseach or inhibited by slow and cumbersome administrative regulations not suited to the research activities now approved or required. The establishment of the Forest Products Research Institute will not entail additional expenditures. There exists a Forest Products Labo-

ratory with adequate plant facilities to perform the necessary research work. Converting the laboratory into an Institute would endow it with the flexibility so necessary in research, improve its ability to accomplish its purposes with maximum efficiency in the use of manpower, money and equipment, provide for industry representation in its management, facilitate the development of a private service function, and encourage its operation from private funds.

The Forest Products Laboratory (CP 474) and the Forest Products Research Section in the Bureau of Forestry therefore should be abolished and their functions, appropriations, property, equipment, and records transferred to the Forest Products Research Institute, together with such personnel as may be necessary.

Place the Institute under the University of the Philippines for policy coordination.

The Institute should be under the general supervision of the University of the Philippines. This is because the Institute's research is closely related to the research work of the College of Forestry and the training of The Institute's work will foresters. also be of major interest to the Bureau of Forestry. To insure coordination between the Bureau of Forestry and the Institute, the Director of Forestry should be the ex officio Chairman of the Board of Directors of the Institute. The Bureau of Forestry should continue to disseminate to the general public the results of the Institute's research in conjunction with other informative materials. Specific requests for technical information should be made directly to the Institute. The powers of the Institute should be vested in and exercised by the Board of Directors.

The composition of the Board is such that the timber and wood-using industries are represented with one member each while a third should come from and represent the general public. The management of the Institute should be vested in the Director. By not making him a member of the Board of Directors, a clear distinction between the policy-making powers of the Board and the execution and implementation of such policies is maintained.

c. Provided that the organization of the Institute should include a Director, an Assistant Director, and the following divisions: Administrative Services, Wood Technology, Industrial Investigation, Chemical Investigation, and Wood Preservation.

The Assistant Director should be the immediate aide of the Director and should assist him in managing the operation of the Institute. The divisions should have the following responsibilities:

- Administrative Services Division
 —responsible for the personal actions, budget and finance, procurement and distribution of equipment supplies, publications and information, maintenance of records, and other related activities.
- 2) Industrial Investigation Division responsible for the research into the mechanical properties of wood and the comparison and evaluation of different species of wood with regard to their behaviour or response during processing operation.
- 3) Wood Technology Division—responsible for conducting studies into the anatomy of wood for the purpose of identification, investigation of the suitability of wood for veneer and plywood, and utilization of minor forest products.

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A Forestry...

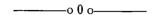
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- 4) Chemical Investigation Division responsible for research on the pulp and paper making qualities of wood and the chemical composition and other properties for the purpose of determining suitability for various uses.
- 5) Wood Preservation Division—responsible for conducting studies on the seasoning properties of wood, preservation, and resistance to fire, fungi, and insects.
- 2. Create a Forest Products Research Fund. As a revolving fund for the Institute's it is proposed that service fee derived by the Bureau of Forestry for inspection and identification of logs, timber ties, and other forest products (particularly those derived from the operation of Forestry Administrative Order No. 15, dated July 31, 1955, as amended by Forestry Administrative Order No. 9, dated June 21, 1947) be constituted into a Forest Products Research Fund which should be available exclusively for the use of the Institute. A research institution of this kind will require a substantial fund which will secure to it from year to year. Congressional appropriation to augment the research fund above that produced by service fees is encouraged and necessary. Since the research work being conducted by the Institute will redound to the benefit of the lumber industry, it is only proper that industry contribute to its support. The use of fees arising from the sales or processing of timber for maintenance of the Institute is justified initially as a means of relating the cost of the laboratory more directly to those immediately benefiting. To this fund should likewise accrue grants, donations, fees, service charges derived by

the Institute in connection with its

B. F. Notes . . . (Continued from page 62)

the ground, or the ground will have been so shaded as to be unfavorable for successful regeneration. They stated that delayed restocking is not conducive to sustained-yield program, so much so that "there is a need of doing some planting in such areas to improve the stands."



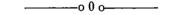
CLAVERIA ROTARY CLUB SPEAKER

Basilan City.—The Bureau of forestry and lumbermen as well as the general public particularly well-informed men like Rotarians should work as a well-coordinated team if sustained yield management plan is to be successfully implemented.

This was the gist of the extemporaneous speech of District Forester Jose R. Claveria of Basilan City before the Zamboanga Rotarians who invited him as their guest speaker in their luncheon meeting at Zamboanga City on May 3, 1956.

Speaking on the forestry problems of the country, Forester Claveria revealed that according to recent experimental results, "a seedling will take from 90 to 100 years to attain a merchantable diameter, but actually in Basilan the bureau of forestry requires all lumber companies to leave 'residuals' from 70 cm. diameter an ddown in order to shorten the period to about 30 to 35 years only."

Claveria was introduced by Rotarian-Forester Higino Rebosura who observed that "only dead men are given long list of achievements and virtues."



CAPIZ FORESTRY DISTRICT AWARDED DIPLOMA

Roxas City.—Forestry district office No. 27 at Roxas City was awarded a diploma for "Most Helpful Office of the Year," by the Capiz Press Club at a banquet program and ball held at the Capiz Provincial Capital on April 29. District Forester Alfredo de los Reyes received the diploma for and in behalf of the Bureau of Forestry in general and of the forestry district in particular from Miss Mila Fuentes, Muse of the Capiz Press Club of 1956-57. Governor Jose Dinglasan of Capiz, guest speaker, headed the list of high government officials.

work. If the Institute is successful in its work the reliance upon annual appropriations will be reduced and ultimately the Institute may be completely self-supporting.