

Managing Research Forests - a Preliminary Proposal

RUSLI MOHD, AWANG NOOR ABDUL GHANI, I. FARIDAH HANUM,
MOHAMED ZAKARIA HUSIN and SHUKRI MOHD.

*Faculty of Forestry
Universiti Putra Malaysia
43400 Serdang, Selangor Darul Ehsan, Malaysia.*

EXTENDED ABSTRACT

According to the National Forestry Act, 1984, the state government can dedicate some parts of the permanent reserved forest as "research forest." For the time being, no definition of research forests is provided in the Act. As such, it is up to the state authority to decide which portion of the reserved forest can be set aside for research purposes and for whatever length of time. It is always the case that it is the researcher who helps to identify the forest areas that are suitable for his/her research project. As research activities intensify while the size of permanent reserved forest area keeps on decreasing, there is a need to carefully plan the establishment of research forests and proper systems of management be applied to manage such forests. This paper attempts to offer some suggestions for the establishment and management of research forests.

What are Research Forests?

An easy definition of a research forest is "a part of the permanent reserved forest set aside for the purpose of forestry research as provided by section 10 (1) of the National Forestry Act, 1984." This definition can be a legal definition but it does not help the forest manager in trying to establish and maintain a research forest. Therefore, there is need for an operational definition of a research forest, one that can reflect the basic attributes or characteristics of such a forest. After listening to the deliberation of the first day of the seminar, an operational definition of a research forest is suggested as:

"forest areas of appropriate sizes in the permanent reserved forest that are set aside, either permanently or for some specific time period, for the conduct of research activities in forestry and related field of studies."

Two aspects of the definition that deserve some discussion are the size and permanency of research forests. Do these aspects matter in the establishment of research forests?

The size of a research forest is more critical for some types of research than the others. For example, the size of forest area that needs to be reserved to study the ecology of some wildlife species in their natural habitat can be very large. On the other hand, a sample plot to study the floristic composition of hill forests may not be that large. State governments may not be willing to reserve permanently or even for some long period of time large tracts of virgin forest for the purpose of research because this means revenue forgone. The size of a research forest is critical to a researcher as much as to the state government.

The security (or permanency) of a research forest is a more critical issue. Researchers will not want to invest time and money into a research project if there is no guarantee that the project will complete its full cycle. Again, the state government will not agree to the proposal to freeze permanently some pristine forest areas for research purposes particularly when they badly need the revenue that can be obtained from such forests. A balance has to be agreed between the two opposing interests and many factors can enter into the process of striking that balance.

Types of Forestry Research

A very basic factor that influences the establishment of a research forest is the nature of the research project itself. A research project can be classified in many ways using various criteria. Using time as a criterion, for example, some projects can be classified as long-term while the others as short-term. Based on impacts to the

forest ecosystem, some projects can be classified as destructive while the others are non-destructive. In terms of coverage, as mentioned earlier, some projects require large forest area while the others may not require such large areas.

According to Dato' Zulmukshar's keynote speech yesterday, it is not likely that the state governments will entertain many requests from researchers to set aside forest areas permanently for research. Therefore, the number of permanent research forests is likely to be kept at a minimal and should be reserved for the purpose of conducting long-term non-destructive research projects. Other research projects can be carried out in the parts of the permanent reserved forests.

Management of Long-term Research Forests

If forest areas are to be set aside for long-term research, then a proper management system must be instituted to manage such areas. There are several key components of such a system, the most important one being the research priority policy. This policy together with the other components of the system should be spelled out in the management plan of the research forest.

The research priority policy determines what kinds of research that can be carried out in the research forests and where. These projects should contribute to the attainment of the objectives for which the research forests are established. Implicit in the research priority policy is the formation of research screening committee who is responsible for ensuring that only appropriate research projects are allowed in the research forests. Also, proper research application procedures must be in place and monitored by the committee.

A suggested framework for the research forest management plan is as follows:

- Mission statement
- Goals and objectives
- Research policy and priority
- Descriptions of the forest
- The plan (sub-objectives, zones)
- Organizational structure/staffing
- Record-keeping and communication
- Protection
- Interaction with other uses
- Implementation and control