

ANTHROPOLOGY AND DISASTER: DEFORESTATION

Daylinda B. Cabanilla

Anthropology and the disaster of deforestation are closely related. An anthropological view focusing on the key concept of culture is crucial in the clarification of the problem of deforestation. An illustration of the anthropological view is provided by the case of agroforestry systems design. Recommendations for action for anthropologists are discussed in the conclusion.

Introduction

This brief paper aims to discuss the relationship between anthropology and the disaster of deforestation within the broad framework of our conference theme "Development and Anthropology". More specifically, it attempts (1) to clarify the problem of deforestation using an anthropological perspective, (2) to cite an anthropological view in designing agroforestry systems, and (3) to list some recommendations for action for anthropologists. These are comprehensive objectives and, given the constraints of time, we are delimiting the discussion to a general, rather than specific/detailed level.

What is Deforestation?: Clarifying the Problem

While we all acknowledge that the first thing to do in confronting a problem is to define the problem itself, we often forget to undertake this basic process. We go ahead to propose and implement "solutions" without a clear understanding of the issues. Often, the so-called solutions merely reinforce the problem or become the source of additional problems. Hence, when we look at the disaster that we call deforestation, we must first examine and clarify its meaning.

We find in the case of deforestation that many problems can be traced to its definition. The definition of deforestation in the early years of forestry was narrow; it referred merely to the removal or destruction of trees in forest areas. A more recent definition is that "deforestation is the change in the use of lands from forest to other purposes" (DENR n.d.). Indeed, deforestation has something to do with the forest. But, what is the "forest"? In the early definition of deforestation, "forest" and "trees" were synonyms. The more recent definitions, which consider a forest an ecosystem of plants and animals dominated by trees and bound by areas allocated to forestry, use a systems approach. They take into account the processes in the forest ecosystem. And yet, despite the comprehensiveness of new definitions, the indicator for deforestation continues to be land area per year. In the Philippines, for instance, the Department of Environment and Natural Resources (n.d.) estimates that "the deforestation rate was 100,000 ha. per year in 1935, doubled to 200,000 ha. per year in 1955 and peaked at 300,000 ha. per year in 1969. In 1987, it dropped back to 100,000 ha. per year." From this single indicator of deforestation, we fail to see the consequences of deforestation — loss of biodiversity and genetic diversity, global warming, disruption of ecological cycles (extreme climatic conditions such as droughts and floods, soil erosion, siltation, etc.), and loss of forest peoples' cultures.

The disaster of deforestation can never be addressed adequately unless its definition encompasses all the components and processes in the forest ecosystem and in the wider institutional and societal arena to which it belongs. To narrowly define deforestation and the forest is to delimit the role played by forests. Anthropologists view the forest as a cultural heritage, as particular dynamic cultural systems with components of ideology, environment, technology, and social interactions. Part of the responsibility of anthropologists involved in development work is to anticipate changes that could occur not only in the specific component zeroed in by the development concern but also in the other components.

What are the causes of deforestation? Globally, the causes cited are: commercial logging, cattle ranching, international lending, shifting agriculture, fuelwood collection, multinational interests, military activities, and illegal drugs (Greenpeace Action Tropical Rainforest Campaign). In the Philippines, according to the DENR (n.d.), "deforestation has been caused principally by the conversion of forest lands into both permanent and subsistence/shifting agriculture. This was done legally, through "land for the landless" programs, and illegally,

because of the prevalence of the *kaingin* system in the uplands.” According to the Society of Filipino Foresters (Phil. Daily Inquirer 1991), “forest destruction is the result of several factors, e.g., illegal logging, forest fires, *kaingin*-making, squatting in forestlands, and conversion of forest areas into other uses. The most destructive of these is *kaingin*-making.”

Three major notions can be identified in these statements: (1) forest dwellers are *kaingineros*, (2) *kaingin*-making is a synonym of shifting or swidden agriculture, and (3) shifting agriculture is destructive. The prejudice against upland peoples has persisted in the Philippine government from the Spanish colonial period to the present. This can be seen in the indiscriminate labeling of forest peoples as destructive *kaingineros*, as squatters on government lands (Act No. 274, 1901; PD No. 705, as amended 1975). We should perhaps not be surprised that deforestation has been attributed primarily to *kaingineros* and not to illegal loggers.

Much of the problem can be traced to the vagueness of the term *kaingin*—does *kaingin* refer to shifting cultivation or to any form of agriculture, whether shifting or permanent, done in upland areas? It would seem that the second usage is prevalent, and yet *kaingin* is still explicitly cited as a synonym of shifting cultivation. It is not altogether clear what is being condemned—shifting, permanent, or all kinds of agriculture? Such confusion can be seen in the following statements:

“the destructive practice of shifting cultivation has prevailed, resulting in the rapid destruction and denudation of forest areas... How to drive *kaingineros* out of public forests is a perennial government problem. Neither threat nor military action have stopped these shifting cultivators from engaging in their destructive practices” (PCARRD 1986).

In clarifying the problem of deforestation, the focus of anthropology on culture is important. The holistic approach prods us to look not only at the upland situation but at the total picture. The lowland-upland dichotomy must be seen basically as a geographical differentiation (and even this is not clear; for instance, the legal designation of the uplands as comprising those areas with slopes of at least 18 percent has not been explained fully by policy makers) and not as a distinction of two separate unrelated areas. Indeed, many of the upland problems are caused or aggravated by lowland problems.

The holistic approach also warns us against reductionism both in defining and in trying to solve forest-related problems. Deforestation, as we have mentioned, is caused by complex multiple factors that involve state, private, and military interests on national and global levels. We must ensure that what we call heuristic devices do not end up as counter-heuristic — that our analytical categories (for example, the bifurcation of disasters into “natural” and “cultural”) do not themselves become obstacles to a full understanding of development. The holistic perspective also calls us to correct the perception that shifting cultivation is only a practice, a technology; it is a way of life.

Furthermore, the anthropological definition of culture as a system of learned symbolic behavior tells us that we cannot be ethnocentric, that cultures must not be judged according to the standards of outside cultures. The meanings, the functions/utility of the forest are cultural. Hence, it is only through a truly participatory approach that real development can be attained.

Design of Agroforestry Systems: An Anthropological View

The design of agroforestry systems must be guided by a number of important lessons that have begun to emerge from the early attempts in agroforestry-based rural development.

1. Agroforestry activities in rural communities are part of complex resource and human systems that include social factors which influence the adoption of agroforestry. These factors, which are closely associated with land use, are to be viewed with holistic and situation-specific approaches.
2. The correct and complete identification of local needs, aspirations, and potentials, which is fundamental to successful development efforts, must be based on the views of the local people themselves. Participatory approaches begin with, and not after, the design of an agroforestry-based scheme.
3. An agroforestry project must be clear and explicit about its goals/objectives because these determine the design, implementation, and the evaluation of the project. Multiple

goals (e.g., ecological and socio-economic) may be conflicting or mutually reinforcing. It must be clarified and shown that agroforestry is people-centered.

The design of agroforestry systems must start with the formulation of goals to be attained. These goals must reflect the wider definition of agroforestry as a means to achieve rural development. As such, agroforestry is to be viewed as a response to basic needs felt by the local people, and its goals must show how these needs are to be met. An agroforestry system should not be designed, for example, to "prevent soil erosion" as an end in itself; instead, the prevention of soil erosion must be seen as a means to attain the local need for food through maintenance of soil fertility.

The involvement of local people in the design, and later in the implementation, monitoring, and evaluation, of agroforestry systems is a recognition that a better system can be achieved if the knowledge of outsiders (e.g., scientists, policy makers) is combined with the knowledge of the farmers. In this collaborative people-centered approach, the people's role is to identify their needs and to decide on development priorities. The outsider's role is to facilitate the exploration of a wider range of options in meeting those needs that may be beyond the local people's experience. In playing this supportive role, the outsider must consider the opportunities and constraints as defined by the environmental, technological, socio-economic, cultural, and infrastructural setting. Ultimately, it is the farmer who is the designer of the agroforestry system. What is "appropriate technology" can be defined only by the local people through on-field trials. This is a major difference from conventional practice in which extension workers' recommendations are exclusively based on experiment-station trials.

The benefits of the designing process for agroforestry systems are two-fold: the design itself that is its formal product, and the learning generated through active participation in the process. The importance of the latter cannot be overemphasized. The local people who are defined as the implementors cannot take an effective role if they have not participated in the planning process.

The design of agroforestry systems requires a substantial amount of informational inputs. The guidelines mentioned here are meant only to provide a loose framework for undertaking the process.

Recommendations for Action

Curriculum Review and Re-design

Considering the concerns and demands of development anthropology, there is an urgent need to assess the present curriculum in the university, both in the undergraduate and graduate levels. The current course offerings fall short of providing the competencies and commitment required in development anthropology. The curricular review may profit from a workshop where anthropologists who have been involved in development work can evaluate the strengths and limitations of their academic preparation.

Training

In development circles, there is an increasing recognition of the importance of anthropological perspectives and methods. There should therefore be an accelerated response by anthropologists to conduct training courses for non-anthropologists who are in development work.

On the other hand, anthropologists should also be trained in non-anthropological areas; for instance, technical matters in agriculture, forestry, and health.

Advocacy

The need to embark on advocacy can be answered through strengthening our networks with other organizations, popularizing concerns through the mass media, publication of an anthropology journal, and conduct of local conferences on local development issues.

However, advocacy requires that we have sufficient data about issues, otherwise we will not know what to advocate. There is, therefore, need for anthropologists to be involved in policy research. Our anthropological studies should contain explicit recommendations for policy directions.

Bibliography

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