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The Social Dynamics of Deforestation in the Brazilian Amazon: An Overview

Discussion Paper No. 36, July 1992

Antonio Carlos Diegues with an appendix by Paul Kageyama and Vergilio Viana

Contents

<u>PREFACE</u>	3
<u>ACKNOWLEDGEMENTS</u>	5
<u>INTRODUCTION</u>	7
<u>1. THE MAGNITUDE AND RATE OF DEFORESTATION</u>	7
<u>2. HISTORY AND POPULATIONS OF AMAZONIA</u>	9
<u>3. "CAUSES" OF AMAZONIAN DEFORESTATION</u>	10
3.1 STRUCTURAL FACTORS	10
(A) THE LAND TENURE SYSTEM	10
(B) POPULATION DYNAMICS	11
(C) AGRICULTURAL MODERNIZATION IN THE RICH SOUTHERN PROVINCES	12
3.2 MACRO-ECONOMIC FACTORS	12
(A) UNEMPLOYMENT	12
(B) INFLATION	13
(C) EXTERNAL DEBT AND DEFORESTATION	13
(D) COMMODITY PRICES, CEREAL CULTIVATION AND DEFORESTATION	13
3.3 THE AMAZONIAN DEVELOPMENT STRATEGY - 1960S TO 1990S	14
INTRODUCTION	14
(A) ROAD CONSTRUCTION AND ORGANIZED RURAL SETTLEMENTS BY INCRA	14
(B) INVESTMENT TAX CREDITS AND FISCAL INCENTIVES FOR LARGE-SCALE AGRICULTURAL AND CATTLE RAISING SCHEMES	16
(C) FISCAL INCENTIVES AND LOGGING	17
(D) LARGE DEVELOPMENT PROJECTS IN AMAZONIA (E.G. THE MINING PROJECT OF GRANDE CARAJAS, SOUTH-EAST PARA)	18
CONCLUSION	19
<u>4. ENVIRONMENTAL IMPACTS OF DEFORESTATION</u>	19

4.1 GLOBAL AND NATIONAL IMPACTS	20
(A) THE GREENHOUSE EFFECT	20
(B) CHANGES IN THE HYDROLOGICAL CYCLES	20
4.2 REGIONAL/LOCAL IMPACTS	21
(A) IMPACTS ON SOILS AND AGRICULTURAL LAND	21
(B) IMPACT OF DEFORESTATION ON TRADITIONAL SHIFTING AGRICULTURE	21
(C) IMPACT ON TRADITIONAL FLOODPLAIN AGRICULTURE	22
(D) IMPACT OF DEFORESTATION ON TRADITIONAL INLAND FISHERIES	22
(E) IMPACT ON FOREST PRODUCTIVITY	22
(F) IMPACT ON BIOLOGICAL DIVERSITY	22
<u>5. SOCIAL CONSEQUENCES OF DEFORESTATION</u>	<u>23</u>
(A) TRADITIONAL RIVERINE POPULATIONS	23
(B) CONSEQUENCES OF DEFORESTATION FOR THE “EXTRACTIVIST” POPULATION (RUBBER TAPPERS, BRAZIL NUT GATHERERS, ETC.)	23
(C) CONSEQUENCES OF DEFORESTATION FOR THE INDIAN POPULATION	26
(D) GROWING LAND CONFLICTS	27
<u>6. SOCIAL RESPONSES TO DEFORESTATION</u>	<u>28</u>
6.1 SOCIAL MOVEMENTS OF PEOPLE DISPLACED BY DAM CONSTRUCTION	28
6.2 SOCIAL MOVEMENTS OF THE INDIGENOUS POPULATION	29
6.3 THE NATIONAL MOVEMENT OF RUBBER TAPPERS AND THE FOREST PEOPLE AND THEIR PROPOSAL FOR EXTRACTIVE RESERVES	29
(A) THE NEED FOR FOREST CONSERVATION IN THESE PARTS OF AMAZONIA UNDERGOING RAPID TRANSFORMATION	30
(B) THE NEED FOR SECURE LAND RIGHTS AND RESPONSIBILITIES	30
(C) THE NEED FOR LOCALLY CONTROLLED DEVELOPMENT	30
(D) THE NEED FOR ECONOMICALLY PRODUCTIVE USES OF FOREST LANDS	30
(E) THE NEED FOR BETTER SOCIAL ORGANIZATION	31
<u>7. ALTERNATIVES TO DEFORESTATION IN AMAZONIA</u>	<u>32</u>
<u>APPENDIX: FINDING TECHNICAL ALTERNATIVES THAT COULD HELP IN HALTING DEFORESTATION (SOME FOREST RESEARCH PRIORITIES)</u>	<u>33</u>
A.1 THE NEED OF ALTERNATIVE PRODUCTION SYSTEMS	33
A.2 FORESTRY AND AGROFORESTRY ALTERNATIVES	34
(A) NATURAL FOREST MANAGEMENT	34
(B) AGROFORESTRY	36
(C) NEO-EXTRACTIVISM	37
(D) GENETIC CONSERVATION	38
<u>BIBLIOGRAPHY</u>	<u>40</u>

Preface

The UNRISD research programme on the **Social Dynamics of Deforestation in Developing Countries** is concerned with analysing how deforestation processes are generated in different ecological and socio-economic settings and how they affect the livelihood of different social groups. The programme has included local level case studies in Brazil, Central America, Nepal and Tanzania, as well as eight studies of specific themes which cut across countries and regions.

This paper by the Brazilian social scientist Antonio Diegues presents a preliminary assessment of the social origins and impact of deforestation in Brazil's Amazon region, as well as ideas regarding practical alternatives to deforestation. The paper was also intended to provide a coherent conceptual and methodological framework for detailed case studies that followed. It is based on a wide body of secondary sources, consultations with key informants and visits to proposed research sites.

When analysing the causes of deforestation, the paper emphasizes the role played by processes of economic and social change associated with the unequal distribution of land, commercialization of agriculture, landloss and poverty. These conditions have resulted in the expulsion of poor peasants to the Amazon forest frontier areas. Other factors such as inflation and land speculation have also underpinned deforestation. The paper argues, however, that the chief responsibility for most of the massive deforestation lies principally with the government and its development strategy of the past three decades which, through credit, tax and other incentives, has enabled large scale agricultural and cattle raising schemes to be established. The promotion of mining and hydroelectric projects in the Amazon and efforts to increase exports to pay the huge external debt have also contributed to deforestation. The paper stresses that deforestation in the Amazon should be analysed in the context of Brazil's insertion in the world economy and its overall development style.

Many poorer and weaker social groups have been deeply affected by the deforestation processes in the Amazon. The paper refers to the case of the rubber tappers who have been dispossessed by large landowners, corporations and cattle ranchers. Another group which has suffered, partly because of the growth of gold mining in the Amazon, is the Amerindian population. There is an escalating level of violence in the Amazon, as these groups attempt to resist land invasions.

The paper goes on to identify different alternative forest or land use practices that have been adopted in the Amazon. It discusses the concept of "neo-extractivism" which has evolved from movements of the rubber tappers and other forest-based people. This resource management system seeks to protect the forest and provide secure, sustainable, forest-based employment for these different groups of people who are dependent on the Amazon forests. Furthermore, it attempts to maintain the socio-cultural identity of indigenous populations such as the Indians.

The paper concludes with an annex on the technical, forestry and agroforestry alternatives to combat deforestation. With limited scientific research available, much of the knowledge about this area rests with the local Amazonian population. More research at the local level is called for in order to find solutions to the problem of deforestation in the Brazilian Amazon.

Antonio Diegues is the Co-ordinator of the Programme of Research and Conservation of Wetlands in Brazil, of the University of Sao Paulo. The annex was prepared by Paulo Kageyama and Virgilio Viana, both forestry engineers and staff members of the University. The UNRISD project on the Social Dynamics of Deforestation is co-ordinated by Krishna Ghimire with Solon Barraclough as senior consultant.

July 1992

Dharam Ghai
Director

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Summary

The objectives of this paper are to review the main socio-economic relationships and processes leading to deforestation in the Brazilian Amazonia, to assess its apparent consequences for various groups of local inhabitants and to look at some of their collective responses.

The most important process underlying the deforestation of the region is the accelerating economic incorporation into the national economy of the largest remaining frontier of Brazil (Amazonia represents over half of the nation's territory). Capitalist investment has been taking place rapidly in the region. This process of investment and incorporation (the military speak of "occupation") is leading to certain patterns of land concentration and skewed income distribution similar to those that exist in other parts of the country.

The short period of time in which this most recent economic expansion in the region has been taking place, the relative absence of formal social institutions (including those of government) in this vast area, and the nature of the region's natural resources have all contributed to high levels of conflict and violence. There are many conflicts of interests between different actors and social groups. On the one hand, there are the traditional dwellers of Amazonia - the Amerindian tribes, the riverine population and the rubber tappers. On the other hand, there are many newcomers to the region: representatives of multinational interests such as mining; national investors in the region's resources and commerce; various public agencies as well as numerous landless low-income people from the south and north-east looking for ways to improve precarious livelihoods. The conflicts that ensue and their dynamics are closely reflected in changing patterns of land use and land tenure and of course have implications for the appropriation of natural resources by different groups.

Changes from traditional land use such as rubber tapping, fisheries and shifting agriculture, to so-called "modern ones" such as cattle raising, intensive agriculture, land settlements, logging and mining, have lead to deforestation and conflicts.

Government policy and strategy is another key element to understanding the deforestation of Amazonia. The policies have changed dramatically in the last 20 years, from promoting small-scale settlements to encouraging large agricultural livestock schemes and large mining projects. Every shift in government policy had a different impact on deforestation.

Deforestation processes and their social impacts have shown different patterns in regions dominated by large estates such as in south-east Para and in areas more dominated by organized rural settlements, as in Rondônia in western Amazonia (see map).

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