

# Birth and Death in Cagayan de Oro

Francis Madigan SJ



**BIRTH and DEATH in CAGAYAN de ORO**  
**Population Dynamics in a Medium-sized Philippine City**

Francis C. Madigan, S.J.

*with the assistance of*

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This book is dedicated  
to  
**RUPERT BAYLESS VANCE**  
Scholar, Wit, and Keen Student of Population Phenomena  
With the Esteem and Appreciation  
of the  
Senior Author

## Foreword

This monograph marks the culmination of years of painstaking research on the facts of life in Cagayan de Oro. It exemplifies the goal of the researcher, Father Francis C. Madigan, S.J. to extend the frontiers of demographic knowledge, particularly on the local level in the Philippines.

Too often demographic research reports are too narrow in focus — miss sight of the matrix of interrelationships implied by studies of man in his journey from the cradle to the grave.

Happily, *Birth and Death in Cagayan de Oro: Population Dynamics in a Medium-sized Philippine City* escapes this narrow outlook. While it analyzes demographically a central city, the study takes on a much broader viewpoint.

Indeed, as Father Madigan points out, insights would be provided by this city study for projecting future trends in Philippine population. All over the developing world, cities assume a leading role in modernization and development. And this is why more studies of this nature should be undertaken. The data presented and the conclusions reached should prove useful in the formulation of policies which would affect the life and death of the individual Filipino.

It is my hope that this monograph may inspire others to ferret out the facts and explode the myths that surround the "population problem."

MERCEDES B. CONCEPCION

## Preface

This book is a research report. It summarizes, if not interestingly, at least clearly, I hope, several years of research and analysis upon the fertility, mortality, and allied phenomena of the people of Cagayan de Oro. This city is the capital of Misamis Oriental Province in northern Mindanao. Mindanao in turn is the second largest island in the Philippine archipelago and is situated northeast of Borneo in the southern Philippines. The data upon which the analysis is chiefly based were gathered in a field study during the last quarter of 1963.

To the limited extent permitted by a cross-sectional survey, vital data have been followed over time. They have also been compared with similar data from the Philippines and from foreign sources. The analysis often involved casting the data into several different complementary rates and measures as well as breaking the data down by age and sex and comparing data for one social category with data for other social categories. Because of sample size, that is, a sample of 2,074 families, desired rates could not always be derived directly from the survey data alone, which led to the making of various assumptions in order to produce the desired rates. This has at times probably affected the nature of results to some degree. Such derivations will be made explicit during the course of the book.

Readers not familiar with the Philippine vital registration system may wonder why such a costly survey was ever undertaken, since, presumably, data from the registration system



could be counted upon to reproduce the results of this survey at a fraction of its cost. In answer to such an objection, it may be said that while efforts are being made currently to improve registration in the Philippines, data from the system are still so incomplete as to make vital rates based upon such data more conjectural than informational. In 1964, a governmental survey found that 39.7 per cent of the births and 30.0 per cent of the deaths of the previous year had not been registered. Further, in the Census Enumeration Region of Northeastern Mindanao, in which Cagayan de Oro is situated, only 36.7 per cent of the births and only 22.0 per cent of the deaths had been registered.<sup>1</sup>

Mainly for this reason, valid data on any Philippine locality or for the entire nation in terms of crude birth rates and death rates are hard to come by. Much more is this true of age-adjusted, age-specific, and social-category rates. In fact, for the most part, such data do not exist.

The data here presented for the fifteenth largest city of the Philippines in 1960, Cagayan de Oro, acquire increased importance in this light. Persons asking questions about birth and death levels in the Philippines in general or in specific localities may find some clarification of these questions in terms of rates by age, sex, or other variables, found in Cagayan de Oro. This is not to say that the rates of Cagayan are generalizable to the whole country or any locality in it indiscriminately. Nevertheless, knowledge of the rates and conditions found in Cagayan will give background against which one may judge what levels of rates are reasonable for other cities, or for more rural areas where one may safely suppose health services and facilities are less adequate than in Cagayan.

A qualification of these data should be kept in mind. The data relate only to the central city of Cagayan de Oro, not also to its rural areas. Like many other chartered cities of the Philippines, the 412.8 square kilometers of Cagayan (about 159 square miles) constitute a sub-province containing sparsely-settled rural areas as well as a "sociological" city (which no longer corresponds, because of growth, to the politically defined "poblacion" of the census).

Thus data from farm localities and hamlets were excluded from this report, and the population studied was limited to families resident in the central or sociological city, and (for mortality) their relatives.

The chief research interest prompted this delimitation of scope. We wanted to discover the relation of urban Philippine fertility to the national fertility. We were interested here in several problems among which were the possible beginnings of a decline from national fertility levels occasioned by city living; social, cultural, and psychological clues to factors in the high Filipino birth rate, which study of an urban population might possibly furnish; and finally the nature of the various age-specific levels of fertility of a Filipino urban population.

Differentials by social categories in both fertility and mortality might furnish, we thought, evidence helpful to illuminate the above problems. For example, if our data showed that substantial fertility decline had not occurred in the Cagayan population as a whole, could the beginnings of such a decline be foreseen in the reduced fertility of the more privileged classes? Further, life chances would presumably be linked in systematic fashion with social rank; what would be the patterns of such linkage? Is it valid to assume that patterns of inverse fertility by social class will be found in Asia as well as in the Western world, or that mortality by social class will follow Western patterns, despite the extremely different cultural contexts in which the populations of these two hemispheres are found? Warren Robinson has cited evidence which raises doubts about assumptions of similar patterns in East and West.<sup>2</sup> We were interested in following up several questions he had raised, in Philippine data. This furnished another reason for limiting our study to an urban population. In the southern Philippines a clear distinction of a middle from an upper and a lower class could be found, it seemed to us, only in an urban population.

The Philippine economy must gait itself to provide by the year 2,000 A.D. for the 80 to 100 million people that present growth trends indicate will inhabit the country by that date. This implies both development and transformation of the economy. The industrial, agricultural, commercial, forest, and mineral resources of the land must be harnessed into a greatly expanded productivity.

While development is the most obvious and most important aspect of the effort to raise Philippine levels of living, the population side of the same coin is of great urgency, too. Present living levels are not adequate, and the great mass of the people are undernourished and underprivileged. Even



in the face of substantial economic progress and increase in productivity per capita, huge increases in population seem likely to us to swallow up so much of the increased output that gains will be nullified and living standards will deteriorate unless the present rate of population growth begins to decline.

This book should prove useful to persons primarily interested in population aspects of the problem of development. However, we believe it should also be studied carefully by social and economic planners who customarily stress more heavily increases in production. Projections of the general population, of school populations, of the labor force, and of other social and economic categories, while primarily related to population considerations, have at the same time close relationships with economic and other social factors. Data given in this book should be helpful as background for such projections.

This book is directed at a further class of readers beyond the demographer and the socio-economic planner. It is directed at persons, public and private, who at various levels are charged with responsibilities for guiding the political, economic, and social life of the nation. It is also aimed at college-level persons who may at a future date assume such responsibilities.

Dedicated public service and private energies are capable of solving the developmental problems related to ushering in a better era for the Filipino common man. But the time of day is late. The masses are growing increasingly disgusted with the democracy which they have been experiencing: political chicanery, empty promises of better conditions in a vague future which somehow never begins to materialize, and economic bondage to the wealthy. In earlier eras their forefathers experienced a respect for their own status and a satisfaction which their own society no longer affords them. They are beginning to ask themselves whether communist models from Russia or China would not better develop their resources and share the national benefits more equitably among all the people.

This book will perform a worthwhile function if its data upon rate of population increase provide food for serious reflection to the above-mentioned leaders upon the need for genuine dedication to the economic growth of the Philippines and to a better distribution of the national income. An over-large population is being built up on an inadequate economic

base. What is worse, the situation is exacerbated by the drying up of watersheds caused by irresponsible exploitation of the forest lands; by erosion of the top-soil and the sub-soil caused by a combination of logging, of squatters who settle on logged-out areas with their disastrous methods of clearing the land by recurrent burnings, and of primitive farm technologies; and by soil-mining due to various factors.

The widespread laissez-faire dealings of the rich and powerful with the poor and helpless are adding their bit to providing a ready soil for unrest, for anti-social attitudes, and for serious, even violent, social conflicts. If present widespread lack of social concern, dedication, and basic honesty in public office continue unchanged through the next several decades, economic hardships, like drought or recurrent crop failures or poor prices, may touch off explosions that will be extremely serious for the national stability and welfare.

The writer hopes that demographers will find interesting as well as useful these data upon a prominent regional city of this unique and interesting Southeast Asian people of the Philippines. Since this report is also written for the general, college-level reader, it has been necessary to interpret common demographic terms in non-technical language. The writer trusts that such readers will find in this work insights into the dynamics of population growth in the Philippines and into the problems that such growth is causing.

I express appreciation to the National Science Development Board of the Republic of the Philippines for the grant to carry out the research reported in this book. I express thanks also to Xavier University for the use of facilities, the cooperation of faculty members, and other helpfulness extended during the time of this project.

I also express appreciation to Philippine Packing Corporation for processing our data at low cost upon their IBM equipment.

Thanks are particularly due to Mrs. Rosalia O. Avanceña, of the Department of Economics of Xavier University, who collaborated with me for four months during the preliminary period, when we prepared and pre-tested English and Visayan interview schedules, and during the data-gathering period, when she directed field operations. I am grateful, too, to the twenty-five interviewers, the six coders, and the several

statistical clerks who worked patiently and carefully upon this project.

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The assistance of Mr. Fred Gales, Mr. Eugene Padilla, Mr. Expedito Alaba, and Mrs. Winnie Llamera in preparing typed copies of this manuscript is also gratefully acknowledged.

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 for Mindanao Culture*

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