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THIRD ANNUAL REPORT

211(d) Annual Report

Date: October 1972

Title: Institutional Development Grant No. AID/cad-2547

Grantee: University of Michigan

Director: Professor Elliot Berg

A. Statistical Summary:

Period of Grant: November 20, 1969 to November 20, 1974
Amount of Grant: \$675,000
Expenditures for Report Year: \$167,156
Accumulated: \$286,896
Anticipated for next year: \$145,940

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B. NARRATIVE SUMMARY

The general objective of the 211(d) Grant to CRED is to develop the University of Michigan's institutional capacity in the area of African economics. The Grant allows CRED to expand its research staff, its links with other units in the University, its administrative and planning capacity, with the aim of developing at the University of Michigan a center of excellence in the study of economic development problems in Africa. The Grant is intended to encourage thereby research on problems and in geographic areas relevant to A.I.D. concerns, and to develop an institution which can be called upon by A.I.D. (or by other donors or by the LDC's directly) to help as consultants and advisors in planning and policy and implementation. The Grant suggests that CRED give research attention to several broad functional areas: issues in public sector decision-making, including planning-budgeting problems; aspects of human resource development, including demography and employment-incomes policies; issues in international trade and development. The Grant also mentions that CRED should give special attention to Francophone Africa.

1. In the period under review the University has moved toward the satisfaction of Grant objectives in the following manner.

(a) Four new Research Associates joined CRED's staff: Judith Harrington (Ph.D., Cornell, Demography); Peter Heller (Ph.D. Economics, Harvard); Izevbuwa Osayimwese (Ph.D., Economics, Northwestern); Charles Staelin (Ph.D. Economics, Michigan).

(b) Another five additional staff were recruited during the year, and will join CRED in 1972-73; Howard Elliott (Economics, Princeton); Peter Moock (Education and Economics, Columbia); Joyce Moock (Anthropology, Columbia); Kenneth Shapiro (Agricultural Economics, Stanford); Peter Weisel (Economics, Oregon). All these new staff members have extensive African field experience in the Ivory Coast, Liberia, Uganda, Tanzania, and Kenya. It is to be noted that five of the appointments of the past two years are shared with other units in the University, indicating a growing interdisciplinary involvement by CRED and a broadening of the University's commitment to CRED as a result of the 211(d) Grant.

(c) Research activity expanded with increases in staff size. Several new research programs were developed into formal projects -- an economic-demographic study of migration in Nigeria; a study of export promotion policies and techniques; a study of the Tunisian development experience since 1960; aspects of health economics and planning. Fifteen publications were issued during the year.

(d) During the year CRED awarded 30 research assistantships and eight fellowships. These awards not only facilitate research output but stimulate interest in development among graduate students. One result of this stimulus is that the University contributes significantly to the supply of trained and able young economists working in the field of development. In 1971-72, five CRED-supported students completed their graduate

work and found employment in the field, two of them with the I.B.R.D., one with the Government of Tanzania, one at Yale and one at the Urban Institute.

(e) New staff and improved administration allowed senior staff time for planning and exploration of new programs related to the objectives set down in the 211(d) Grant. In addition to the research projects mentioned above, a major new program was developed to meet needs for teachers and researchers in Francophone Africa. This program was approved by A.I.D. in June 1972; four economists will be teaching in Francophone African universities next year under this program -- one each in Dakar, Abidjan, Youandé, and Kinshasa.

(f) The Morocco economic advisory project was fully staffed and the departing first project director received a special commendation from U.S.A.I.D. in Morocco. The Center's advisory capabilities were also utilized during the year by A.I.D., U.S.I.S., I.B.R.D., and O.E.C.D.

Total CRED expenditures during the year were \$550,000. This total was financed as follows: A.I.D./211(d) \$167,000; Ford and Rockefeller Foundations \$151,000, A.I.D./Morocco Project \$165,000, Other \$76,000. The 211(d) financing, while only about 30 per cent of total expenditures is now over 50 per cent of CRED's general or "core" expenditures -- those on which the Center's overall activities rest.

C. DETAILED REPORT

I. GENERAL BACKGROUND AND PURPOSE OF GRANT

The University of Michigan has wide interests and broad general capacity in the area of international development. In addition to the Center for Research on Economic Development, there are three regional centers dealing with less developed areas-- the Center for Near Eastern and North African Studies, the Center for South and Southeast Asian Studies, and the Center for Chinese Studies. The University also supports three programs in demography, population policies and family planning each of which focuses on problems crucial in development economies. Many of the faculties, institutes and departments have ongoing programs in the development field--the School of Education, the Law School, the School of Natural Resources, the Institute for Social Research.

The Center for Research on Economic Development (CRED) is an interdisciplinary body of the University of Michigan, with special connection to the Department of Economics. CRED has been in existence since 1960; it was under the direction of Professor Wolfgang F. Stolper from 1963 to 1970. The present director, Professor Elliot Berg, assumed this duty in 1970. The major sources of CRED financing prior to this grant were a university subvention of \$30,000 a year and a direct Ford Foundation grant of about \$100,000 a year. The tenured core staff of CRED included: Professor Elliot Berg, Richard C. Porter, and Wolfgang Stolper, all of whom hold half-time teaching appointments. In addition, CRED makes term appointments of Research Associates. Faculty and graduate student research related to development problems are also supported. Students from Africa as well as other developing areas receive special attention.

Certain general principles or operating guidelines have characterized CRED's orientation since 1963.

a) A university research center in the development field must combine teaching and research with operating activities in the less-developed countries themselves, since the relevance of research and the meaningfulness of teaching depends on maintaining close contact with the real policy problems of LDC's. Development is not a field in which teachers or researchers and practitioners can be separated--not at least if the teachers-researchers hope to have an impact through writing and advising, or to make sense in their teaching. Periodic operating and advisory work in LDC's, as well as research in the field, is therefore essential for all staff members.

b) A research center in the development field has obligations to the wider community. A substantial part of its research activities should be oriented toward meeting the needs of LDC's. It is essential to encourage genuinely basic research--for example, the generation of new and better data, analysis of how markets actually work or don't work, investigation of underlying structural relationships. In general, policy-oriented research should have the highest priority.

c) A research center in this field also has an obligation to provide ideas and people for the actual collaboration with the LDC's, working with aid giving institutions and LDC governments in a technical assistance capacity, by providing training facilities here, and by cooperation in the development of teaching and research institutions abroad.

The activities of the Center since 1964 reflect these general principles.

Most of the research activities of the CRED staff have been focused on policy issues, with considerable emphasis on African problems. Thus Professor Stolper has worked on the Nigerian planning experience, and on problems of economic planning with particular attention to relations between plans, budgets, and the balance of payments. Professor Berg's recent writing has been on wage structure, wage policy, strategies of African development and the Liberian planning experience. Professor Porter has worked on the behavior of primary product prices, the impact of industrial incentive legislation, in general and in Colombia, and export problems of LDC's. Other associates of the Center have worked on: problems of agricultural change; agricultural structure and rural markets in West Africa; two-gap models in Latin America; accounting prices in theory and practice; the applicability of quantitative models of "performance criteria"; budget models and monetary policy; and, health planning.

The Center has also promoted graduate studies in economic development, especially in Africa. Between 1960 and 1967 almost \$100,000 was made available for graduate student Fellowships. In the past three years ten students have been sent abroad for dissertation research, most of them to Africa.

CRED has combined work in the less developed countries with teaching and writing in Ann Arbor; its staff members have been called upon frequently by various national and international agencies--AID, the World Bank, the Inter-American Development Bank, the Ford Foundation--for studies and missions in the field.

At the time of the grant CRED was administered by a Director and two Associate Directors. It is supervised by an Executive Committee whose ex-officio members are the Dean of the College of Literature, Science and the Arts, the Chairman of the Department of Economics, and the Director and Associate Directors of CRED. At present other members are the Dean of the Graduate School and professors of Political Science, Near Eastern and North African Studies, Geography and Sociology, all of whom have major interests and experience in international affairs.

II. OBJECTIVES OF THE GRANT

a) Objectives Restated

The general objectives of the grant were to maintain and expand the capacity of the University of Michigan, and specifically its Center for Research on Economic Development (CRED), in the field of economic development, and to allow CRED to enhance its capability for providing assistance to AID and other aid-giving institutions or directly to African countries. With the general shrinkage of private financial support for international affairs programs in American universities, CRED's resources began to decline after 1968. In the absence of new support, it would have been necessary to reduce the Center's staff and activity to a minimum, dismantling its general research and advisory capacity. The grant allows CRED to maintain this capacity; it also created the opportunity to enlarge, improve and diversify it.

b) Areas of Activity

The general objectives of the grant are being pursued in the following activity areas:

1. Expansion of staff available for research and consulting work. This larger staff permits greater flexibility in teaching, research, and advisory or consulting assignments.
2. Expansion and improvement of CRED, the research facilities, especially its library facilities.
3. Expansion of research in areas important to less developed countries and relevant to AID policy.
4. Collaboration with other internationally oriented programs at the University of Michigan generally contributing to increasing the University's competence in the area of international development. Particular attention is given to collaboration with centers of population research at the University.
5. Improvement of CRED general administrative capacity.
6. Stimulation of interest in African development problems in the University community including the provision of fellowships and travel funds for dissertation research in Africa.
7. Bring to the University for up to one year periods of course work or writing, African civil servants or academicians.
8. Enrichment of the African content of courses, particularly in a graduate seminar in development. The problems of development administration will receive special attention.
9. CRED will attempt to attract to Michigan mid-career and senior officials of AID and other foreign affairs agencies, for refresher or research periods.

c) Reviews of Objectives and Activity Areas

During 1970-71, CRED continued to apply experience gained through the support of the Grant in making certain adjustments in its activities. These are designed to increase their contribution to established general objectives. It is strongly felt that changes noted below and others which are under preliminary consideration are a reflection of accomplishment involving a continuous appraisal and adjustment of the CRED program.

1. During 1970-71 a modification in recruiting policy was initiated. It will be recalled that the original plan was to expand the research associate staff under initial three-year agreements with new associates. This was to include a first year in Ann Arbor, a second research year abroad and a third year back at CRED writing up research results. This practice will be modified by emphasizing the recruitment of Ph.D. economists combining high academic credentials with demonstrated successful overseas teaching or development advisory activity. At recruitment they will be encouraged to go directly to the field to engage in research and/or teaching. This change in emphasis is the result of a coincidence of several factors that emerged in our experience to date: a) the unfortunate but nonetheless real reduction in job opportunities for persons in development-related work, which gives CRED a greater choice of candidates with overseas experience; b) the original CRED strategy had limitations in practice; these staff members concentrated on extracting publishable material from their recently completed dissertations which, reflecting Africa's low priority in development research, did not usually deal with Africa; this new staff lacked adequate knowledge of Africa to design hard research projects (the one associate with prior African experience developed the first firm-financed research project); in the first year at the University, associates are subject to strong conflicting demands that mitigate against willingness to spend a subsequent year off the campus. Appendix 2 (A Progress Report on the Professor/Researcher Program in Francophone Africa) describes a program begun late in this reporting year that starts newly appointed research associates with two years of teaching/research in Africa, followed by a third year at CRED in Ann Arbor.

2. The prior review of CRED's 1970-71 Grant-assisted activities emphasized the desirability of giving greater focus or specificity to the prevailing general research priorities of the Center. This objective has not been easily achieved as there is a strong conviction among CRED staff supporting the free academic environment which now prevails. As has been noted elsewhere, associates of CRED work on special fields compatible with their own intellectual interests and convictions. However, effort has been made to explore alternative instruments to greater focus. It has been concluded that the prevailing wide range of subjects treated should not be curtailed by direct action. To contribute to increased concentration, it is proposed that a limited number of specialized workshops be organized. These will be on carefully chosen, specific sub-areas of CRED's general research priorities. Effort will be made through the leadership of these workshops to stimulate specific, problem-oriented research, reading and group discussions. A case in point, to be undertaken as a test, will be the requirements for shaping effective rural development

projects. This will be a special focus within a newly emerging Center general interest in rural development questions.

3. With regard to the objective of bringing senior African civil servants and academics to the University it must be recognized that this still is not functioning as desired. It is our view that several conflicting forces need be rationalized. The scarcity of competent African officials make a year's absence difficult to arrange. On the other hand, there is some feeling by donors that a shorter stay by such visitors is not justified. The high daily cost of a short stay is a related source of this concern. In the case of non-English speakers, the language training aspect uses a large block of visiting time.

The following innovations in current methods are under consideration to meet these difficulties in attracting African administrators and professionals to this Center. It is felt that overall benefits from such visits warrant greater flexibility in such a program; for English speakers, three to four month visits should be tried, such time to be spent in auditing of courses of leading University of Michigan faculty, independent study, and two discussion sessions at CRED to get to meet this professional community. For French speakers with little or no English, a French-speaking CRED group could be constituted whereby the visitor would start his stay in French and take 1/2 in English and 1/2 day on development matters in French. Such a visit would not exceed sixty days. A follow-up visit the next year could be considered. The key to the proposed adaptation in either case is shorter visits, coupled with CRED's increasing French competence.

4. The Center has not made any significant progress in attracting U.S. Government officials to the University. It would be simplistic to place full responsibility for shortcomings in this regard on inadequate publicity of this activity, although this has no doubt played a part in the failure in this program. In 1972-73, it is proposed that a formal program of shorter visits supported by publicity in Government can be implemented

III. ACCOMPLISHMENTS

In this section we relate CRED achievements during 1971/72 with regard to the general objectives and activity targets of the grant and of CRED's institutional objectives. To simplify the presentation, we group our activity under three functions: (1) extension and improvement of the University's capacities and activities related to international economic development; (2) provision of assistance to governments, universities and research institutions in less developed countries, particularly in Africa; (3) provision of assistance to aid-giving institutions.

a) Extension and Improvement of University's Capacity in the Fields of International Economic Development with a Special Focus on Africa

1. Expansion of Staff

One of the major objectives of the grant is expansion of CRED staff to allow broader research and advisory efforts. As noted in last year's report, the grant came too late in 1969 to allow recruitment in 1970-71, so the reporting year (1971-72) is the first in which the results of our substantial recruiting efforts are evident. Four new Research Associate appointments were made.

<u>Name</u>	<u>University</u>	<u>Specialization</u>
Dr. Judith Harrington	Cornell	Demography
Dr. Peter Heller	Harvard	Public Finance
Dr. Izevbuwa Osayinwese	Northwestern	Transportation
Dr. Charles Staelin	Michigan	International Trade

Additional staff members were recruited in the Spring of 1972; they are not included in the above list because they join CRED in Fiscal 1972-73. One of these is Howard Elliott, a Princeton product, who has research experience in the Ivory Coast and taught economics in Uganda for two years. Another is Kenneth Shapiro, an agricultural economist from Stanford. Also recruited during this period was Peter Moock, a Ph.D. candidate in Economics and Education (Columbia University) who worked as A.I.D. evaluator of the Vihiga project in Kenya; Joyce Moock, a Social Anthropologist from Columbia, who did her dissertation research on migration in Kenya; Peter Weisel, an Oregon Ph.D. in Economics, who has worked on rural development in Liberia.

The character of these appointments bears on another specific objective of the grant--expansion of the breadth of the University involvement in development problems and in African development problems in particular. Thus Peter Heller is a joint appointee with the Economics Department, Judith Harrington a joint appointment with the Department of Population Planning, Kenneth Shapiro a joint appointment with the School of Natural Resources. It is our hope that Peter and Joyce Moock will also

be jointly appointed by 1973-74--he in the School of Education, she either in the Anthropology Department or in another research unit of the University.

The recruiting effort of the year under review has thus substantially increased the size of CRED staff, made it more interdisciplinary in scope, and resulted in a growth of development-orientation in a number of other units in the University.

2. Teaching

(a) During the year 1971-72 four members of CRED staff (Berg, Heller, Porter, Stolper) taught courses in the Economics Department, both in the field of Economic Development and outside of it: the two-semester graduate course in Economic Development (Economics 665-6); the two-semester graduate seminar in Economic Development (Economics 765-6); one undergraduate course in development. Professor Porter continued his responsibility for the teaching of Economic Principles, and Professor Heller taught an undergraduate theory course. This teaching derives from the fact that all salaried CRED Research Associates have until 1971 held joint appointments in the Economics Department.

(b) The Seminar on Economic Development this year considered budgeting planning relationships as its major subject. In addition to general surveys of the literature on program budgeting and budgets in a planning context the following specific topics were included.

Jakob Kleve
Economic Advisor
Ministry of Planning
Tunisia

Planning and Budgeting in
Tunisia--a Survey (4 seminars)

Robert Pogson, CRED
(formerly, Economic Advisor,
Ministry of Planning, Nigeria)

The Nigerian Planning Experience
and Budget Implications

Ojetunji Aboyade
Professor of Economics
University of Ibadan

Planning and Budgeting in
Nigeria

Wolfgang F. Stolper
CRED

A critical discussion of the
papers presented at the Novem-
ber 1971 Congress of the Insti-
tute of Public Finance in
Nuremberg (PPBS).

Millard F. Long
Development Advisory Service
Harvard University

Financing and Cost-Benefit
Analysis

G. Robinson Gregory
Professor of Natural Resources
University of Michigan

Reflections on Indian Planning

G. Crecine
Professor of Political Science
University of Michigan

PPBS or MacNamara's Band

Sidney Winter
Professor of Economics
University of Michigan

Policy Analysis and Budget
Reform

Jerome Wells
Associate Professor of Economics
University of Pittsburgh

Agricultural Project Analysis
and the Use of the Budget in
Nigeria

3. Research

Each CRED staff member has his own research interests, and this combination of interests, with dissertation research and work of visiting Research Associates, traditionally has been CRED's research program. The unifying aspect of CRED's research activities has been a common inclination toward empirical and policy-oriented research and a continuing interest in certain substantive issues -- planning problems, for example, and a regional focus on Africa. In 1971-1972, Elliot Berg continued his work on economic policy making in Liberia and on general development strategy issues in Africa. Peter Heller undertook studies of health planning in less developed countries and wrote on problems of recurrent budgets with particular reference to Kenya. Richard Porter worked on issues in trade and development, as did Charles Staelin, who focused particularly on export promotion. Wolfgang Stolper began an extensive study of the Tunisian planning experience, in collaboration with Jakob Kleve, a visiting Research Associate. He also did a paper on money in developing economies. Judith Harrington extended her research on West African demography particularly the Francophone areas. Izevbuwa Osayimwese wrote on migration, on transportation economics, and several articles of a theoretical character. Jacques Berthelot, a visiting Research Associate from France, who has experience in agricultural cooperatives in Madagascar and in Francophone Africa, wrote on Francophone approaches to development and also explored the problems of cost benefit analysis of agricultural cooperatives.

One exploratory research project, to which very substantial time was given, came to nothing. This was an attempt to construct a simulation model of the South African economy, which could be used to see the implications of various rates and patterns of growth on employment and income (of various racial groups) and on the structure of the South African economy. The attempt absorbed Professor Porter and two research assistants for several months. Despite much massaging, however, the data proved too sketchy, and in some key areas too unreliable to expect results of much credibility. The research was abandoned.

Certain trends can be noted in CRED research. First in volume and range, it is beginning to reflect recent staff increases, as is indicated in the following list of publications and research in 1971-1972.

Research: July, 1971 - June, 1972

Aho, C. Michael

"The Use of Export Projections in Allocating Foreign Aid Among and Domestic Resources within Developing Countries," CRED Discussion Paper 16, July, 1971, 59 pp.

Bassett, Gilbert

"The Evaluation of Copper Projections," August, 1971. (Research Manuscript).

With J. Kimball Dietrich, and Alfredo D. Gutierrez, An Evaluation of Long Term Projections of Copper, Coffee, and Cocoa (Submitted for publication).

Berg, Elliot J.

"Structural Transformation versus Gradualism: Recent Economic Developments in Ghana and the Ivory Coast," CRED Reprint 22 from Ghana and the Ivory Coast: Perspectives on Modernization, edited by Philip Foster and Aristide R. Zolberg. Published by The University of Chicago Press, 1971, pp. 187-230.

(French translation of "Structural Transformation versus Gradualism ..." (as above) for the Bulletin of the Banque Centrale des Etats de L'Afrique de L'Ouest. In progress.)

Dietrich, J. Kimball

With Alfredo D. Gutierrez, An Evaluation of Short Term Forecasts of Coffee and Cocoa, (Forthcoming in American Journal of Agricultural Economics).

With Gilbert W. Bassett and Alfredo D. Gutierrez, An Evaluation of Long Term Projections of Copper, Coffee, and Cocoa, (Submitted for publication).

"The Evaluation of Cocoa Projections and Forecasts," August, 1971.

Fields, Gary S.

"Private Returns to Investment in Higher Levels of Education in Kenya," CRED Discussion Paper 19, April, 1972, 16 pp.

"A Theory of Education and Labor Markets in Less Developed Countries," 1972, (Thesis).

Gutierrez, Alfredo D.

An Evaluation of Coffee Projections, August, 1971 (Research manuscript).

With J. Kimball Dietrich, An Evaluation of Short Term Forecasts of Coffee and Cocoa, (Forthcoming in American Journal of Agricultural Economics.)

With Gilbert W. Bassett and J. Kimball Dietrich, An Evaluation of Long Term Projections of Copper, Coffee, and Cocoa, (Submitted for publication.)

Harrington, Judith

"The Effect of High Infant and Childhood Mortality on Fertility: The West African Case," Concerned Demography edited by P.G. Marden and R. Reynolds, Cornell University (Forthcoming).

With D.I. Pool, "Infant and Childhood Survivorship in Ghana, Upper Volta and Niger," submitted for publication to Demography (extended and revised version of conference paper).

Research Manuscripts

Two papers were written for in-group discussion concerning the migration project.

Background paper 1. Migration Project: A discussion of the main demographic and sociological trends in migration research and some of the research and theoretical debates that have emerged as important research questions in the field.

Background paper 2. Migrant Project: A discussion of Dr. Harrington's interests in the project and the theoretical background they have come from. Two research questions are discussed and developed in some detail. Finally the pros and cons of various possible methodologies for the study are presented and discussed.

Notes on Migration Project: This is an appendix to Background paper 2 and spells out both general and research hypotheses.

Heller, Peter S.

"A Model of Public Sector Expenditure Dynamics in Less Developed Countries: The Kenyan Case, CRED Discussion Paper 23, 50 pp. Quarterly Journal of Economics (Forthcoming).

"The Strategy of Health Planning in the People's Republic of China," CRED Discussion paper, 62 pp., to be published in the proceedings of the conference held by the Josiah Macy Foundation at the University of Michigan in May, 1972.

Herman, Barry

"The Struggle for National Liberation in Southern Sudan," Submitted for publication to Monthly Review.

With Izevbuwa Osayimwese, "A Comment on 'The General Theory of Factor Usage with Variable Factor Supply,'" 7 pp. Submitted for publication to The Southern Economic Journal.

Hutcheson, Thomas

With Richard C. Porter, "The Cost of Tying Aid: A Method and Some Colombian Estimates," Princeton Studies in International Finance, No. 30, March, 1972, 53 pp.

Johnson, George

"The Determination of Hourly Earnings in Urban Kenya," CRED Discussion Paper 21, May, 1972, 36 pp.

Kennedy, Michael

"An Empirical Evaluation of the Two-Gap Model of Development," CRED Discussion Paper 17, November, 1971, 29 pp.

Kleve, Jacob G.

"The Control of Annual Plans: The Experience of Tunisia," CRED Reprint 26 from The Journal of Modern African Studies, Cambridge University Press, Vol. 9, No. 2, August, 1971, pp. 306-310.

Naranjo, John

With Richard C. Porter, "The Impact of Commonwealth Preference System on the Exports of Latin America to the United Kingdom," CRED Discussion Paper 18, March, 1972, 37 pp.

Osayimwese, Izevbuwa

"Choice of Technology in Transport: An Essay," Journal of Economic Issues, published by the Association for Evolutionary Economics and Michigan State University, 1972.

"An Application of Control Theory to Rural-Urban Migration and Urban Unemployment," CRED Discussion Paper 20, May, 1972, 19 pp. Submitted for publication to Geographical Analysis.

"Some Economic Approaches to Rural-Urban Migration Studies," 18 pp., Submitted for publication to The Journal of Economic Issues.

"An Application of Linear Programming to the Evacuation of Groundnuts in Nigeria," 18 pp. Submitted for publication to The Journal of Transport Economics & Policy.

"Heterogeneous Consumption Goods and Capital Accumulation: A Note," 11 pp. Submitted for publication to The Indian Economic Journal.

"Dependency Rates and Saving Rates: Comment," 6 pp. Submitted for publication to The American Economic Review.

"Dependency Rates and Aggregate Saving Rates: A Methodological Note," 5 pp. Submitted for publication to Demography.

"A Note on Optimal Growth in a Dual Economy," 10 pp. Submitted for publication to Metroeconomica.

With Barry Herman, "A Comment on 'The General Theory of Factor Usage with Variable Factor Supply,'" 7 pp. Submitted for publication to The Southern Economic Journal.

Research Manuscript

"Information and Consumer Behavior in an LDC," 11 pp. First preliminary draft, for unofficial private circulation.

Porter, Richard C.

"Industrialization and Trade Policies in Developing Countries," a review article of O.E.C.D. Series: Industrialization and Trade Policies in Developing Countries from Annals of the American Academy of Political and Social Science, July, 1971, pp. 119-132.

With Charles P. Staelin, "The Rediscovery of Exports by the Third World," CRED Reprint 27 from Foreign Trade Review, January - March, 1972, pp. 523-539.

With John Naranjo, "The Impact of Commonwealth Preference System on the Exports of Latin America to the United Kingdom," CRED Discussion Paper 18, March, 1972, 37 pp.

With Richard Billsborrow, "The Effects of Tax Exemption on Investment by Industrial Firms in Colombia," to be published in Weltwirtschaftliches Archiv, September, 1972, to be distributed as a CRED Reprint.

"The Birth of a Bill Market," to be published in Journal of Development Studies.

With Thomas Hutcheson, "The Cost of Tying Aid: A Method and Some Colombian Estimates," Princeton Studies in International Finance, No. 30, March, 1972, 53 pp.

Research manuscripts

With Charles P. Staelin, "Multifarious Export Promotion."

With Charles P. Staelin, "The Theory of Autarkic Development: A Critical Review."

Posner, Robert

"Agricultural Labor Markets in Kenya," (Thesis), 1972.

Silberman, Ronald Loeb

"The Distributional Impact of Public Housing: A Case Study of Nairobi," (Thesis), 1972.

Snyder, Wayne W.

"Managing Money and Credit in a Developing Economy," CRED Reprint 25 from the Malayan Economic Review, Vol. XVI, No. 1, April, 1971, pp. 1-12.

With Tsutomu Tanaka, "Budget Policy and Economic Stability in Postwar Japan," CRED Reprint 28 from International Economic Review, Vol. 13, No. 1, February, 1972, pp. 85-110.

Staelin, Charles P.

"The Cost and Composition of Indian Exports," CRED Discussion Paper 22, May, 1972, 41 pp. Submitted for publication to Journal of Political Economy.

Review of Income Tax Reform in India by V.V. Borkar, Tariff Protection and Industrialization: A Study of the Indian Tariff Commissions at Work 1946-1965 by Padma Desai, and Political Attitudes of Indian Industry: A Case Study of the Baroda Business Elite by Howard J. Erdman, from The Journal of Asian Studies, February, 1972.

"Effective Exchange Rates for Exports in Pakistan' -- A Comment," 6 pp. Submitted for publication to Journal of Development Studies.

With Richard C. Porter, "The Rediscovery of Exports by the Third World," CRED Reprint 27 from Foreign Trade Review, January-March, 1972, pp. 523-539.

"Indian Export Incentives: A Critical View." Submitted for publication to The Indian Economic Journal.

"Export Promotion in Less Developed Countries: A Case Study of India." (Thesis) 1971.

"Further Issues in the Proper Choice of Techniques for Domestic Resource Cost Ranking." Submitted for publication to Journal of Political Economy.

"A Programming Approach to the Analysis of Import Licensing Schemes for Exporters." Submitted for publication to Journal of International Economics.

Research manuscripts

With Richard C. Porter, "Multifarious Export Promotion."

With Richard C. Porter, "The Theory of Autarkic Development: A Critical Review."

Stolper, Wolfgang F.

Review of Planning Development by K.B. Griffin and J.L. Enos, The Economic Journal, Vol. 81, No. 323, September, 1971, pp. 682-684.

"Limitations of Comprehensive Planning in the Face of Comprehensive Uncertainty: Crisis of Planning or Crisis of Planners?," CRED Reprint 24, from Weltwirtschaftliches Archiv, Vol. 107, No. 1, 1971, pp. 1-32.

"Budget, Economic Policy, and Economic Performance in Underdeveloped Countries," CRED Reprint 23 from Kieler Vorträge, Neue Folge 69, 1971, 33 pp.

"Planung, Preise und Löhne in Unterentwickelten Ländern," chapter in Verstehen und Gestalten der Wirtschaft, Festschrift für Friedrich A. Lutz Published by J.C.B. Mohr (Paul Siebeck) Tübingen, December, 1971, pp. 337-356.

"Begegnung mit August Losch," essay in August Lösch in Memoriam edited by Roland Riegger, Heidenheim, 1971, 53-57.

"Comments on Professor Aboyade's Paper ["The Development Process"] in Reconstruction and Development in Nigeria edited by A.A. Ayida and H.M.A. Onitiri. Published by the Nigerian Institute of Social and Economic Research (NISER), 1971, pp. 72-80.

"Comments on Gustav Ranis' 'Relative Prices in Planning for Economic Development,'" in International Comparisons of Prices and Output edited by D.J. Daly. Published by National Bureau of Economic Research, 1972, pp. 315-325.

"The Balance of Payments of a Small Area as an Analytical Tool," Paper forthcoming in Beiträge zur Theorie der Landschaftsstruktur -- Zu Ehren von August Lösch, edited by Rolf Funck.

"Some Problems of Adapting the Ideas of Budgeting and Planning to Underdeveloped Countries" forthcoming in Festschrift für Professor Bickel.

"The Role of Monetary Institutions in Africa," forthcoming in Proceedings of the Conference on Monetary Integration, Montreal, Canada.

"The Internal Effects of Devaluation," forthcoming in Proceedings of the Conference on Monetary Integration, Montreal, Canada.

Vanderslice, Elwood Lane, Jr.

"The International Coffee Organization and the Control of Coffee Overproduction," (Thesis) 1971.

Secondly, there is a tendency for the geographic focus of research to shift toward Africa, even more than is evident from the above list. Most of the new Research Associates have African experience or interests. Charles Staelin, whose experience has been in Asia, has been shifting his concentration to Africa, and Richard Porter, who has worked in Latin America and Asia, is planning to spend the coming year in East Africa.

Thirdly, despite the continued research sovereignty of the individual associates of CRED, there has appeared a certain focusing of research on key problem areas, most of which were mentioned in the original 2.11(d) Grant. Thus in the area of planning and budgeting, the work of Professor Stolper and Dr. Klove on planning in Tunisia is relevant, as is Professor Berg's work on Liberia, and the studies of Professor Holler (on recurrent budget analysis in Kenya), and Barlow (on aspects of health planning in Morocco). A second cluster of research covers export development, including industrialization problems. Into this general category fall last year's work by Aho, the commodity forecasting papers by graduate students, Gibb, Dietrich and Gutierrez, and the work of Professor Porter and Dr. Staelin. Issues related to wages or incomes policy and employment form a third constellation of research efforts. Professor Johnson's paper on wages in Kenya, Gary Fields' thesis (based on his Kenya experience) which bears on education and employment, and the work of Harrington and Osayimwese on migration all fall into this group of studies. Another area of activity has come directly out of CRED's consulting and advisory functions, notably with the A.I.D. Vihiga Project in Kenya; this has led to a burgeoning research interest in problems of rural development, an interest which we hope to develop further in coming years.

Two other basic tendencies in CRED's research orientation are more procedural than substantive, but nonetheless significant. First, all CRED staff is now encouraged to develop formal research projects which can provide intellectual and financial vehicles for expansion of research. Thus, Judith Harrington and Izevbuwa Osayimwese spent much of 1971-72 working up a research program and a formal project on Demographic-Economic Aspects of Rural-Urban Migration in Nigeria. This project is being done in collaboration with the University of Ibadan, Nigeria. The project has received financial support from A.I.D. Charles Staelin, similarly, has been responsible (with the assistance of Professors Richard Porter and Robert Stern) for developing a research program in the area of export promotion. We have had extensive discussions about this project with A.I.D./Washington. Professor Peter Heller has been working up a proposal on research in health planning, and Professor Barlow spent nine months in Morocco working in the same general area under an A.I.D. grant.

The second procedural tendency is to move away from our original conception of sending researchers to African countries more or less on their own. This original approach is expensive, lengthy and difficult. It is also one which is increasingly unappealing to responsible Africans. Increasingly, research must be done in explicit collaboration with local colleagues in Africa (as Dr. Harrington is doing in working with

Dr. Osayimwese and other Nigerians in Ibadan), or as an associated member of a local university or research institute. We will try in the future to generate research by helping to place well-trained economists in African universities/research institutes, and by offering research assistance to economists already in these organizations.

This Center has always stressed the necessity for field research as a crucial part of the training of a development economist. Experience within an LDC government is particularly useful, since it can give useful insights into decision-making processes and administrative constraints, as well as easier access to data. At the same time, many LDC governments can use the skills and research interests of doctoral candidates.

One way CRED has tried to bring these mutual needs together has been to have Ph.D. candidates accompany senior staff on research or advisory missions abroad. Professor Stolper did this in the past in Morocco, and in the year under review he has worked with Robert Blake, a Michigan Ph.D. candidate, in Tunisia, where Blake is working on Tunisian commercial policy.

This year we undertook a new approach: placing a doctoral candidate within a government planning agency. Mr. Animesh Ghoshal spent seven months working in the Ministry of Planning and Economic Affairs, Republic of Liberia. He engaged in research on the Liberian rubber industry, which will be the subject of his dissertation. At the same time he participated in the work of the Planning Ministry. The arrangement appears to have worked well.

On a more senior level a similar arrangement was worked out for Professor Robin Barlow, who did nine months of field research in Morocco on health economics. He was given an office in the Central Planning Agency of the Moroccan Government.

4. Group Discussions

Most of the "teaching" and diffusion of research results at CRED takes place in a variety of small group discussions, held during lunch hours, or at other times, and usually organized around common themes related to central or emerging research interests of CRED staff and students.

(a) Health Care and Health Planning in LDC's

Peter Heller of CRED and Professor Robert Gross of the School of Public Health have been exploring research ideas and needs in the area of health planning in LDC's. To this end they organized a series of seminars, held mainly at Professor Gross' home in the evening. The following topics were discussed.

Peter Heller, Research Associate, CRED	Health Care Planning in Kenya
Prof. Elliot Berg, Director, CRED	Reflections on Planning Health in Liberia
Dr. Abiola Adeniran, Public Health Official, Nigeria	The Health Care System of Nigeria
Robert Dyer, University of Michigan	The Operation of Health Centers in Bolivia
Dr. Conrad Seippe, University of North Carolina	Experiences in the Reform of the Puerto Rican Health Care System
John Nystuen, University of Michigan	Impact of a Malaria Eradication Program upon Economic Development in Nepal
Dr. Joseph Davis, AID	Problems in Health Planning as viewed by aid Donors
John Hunter and Charles C. Hughes Michigan State University	Disease and Development in Africa
Professor William Reinke, Dept. of International Health, Johns Hopkins Univ.	Functional Approach to Planning Used in Health Projects in Turkey and India by John Hopkins Univ.
Professor Marcelo Selowsky, Dept. of Economics, Harvard University	Estimation of the Rate of Return to Infant Nutrition Programs in Chile
Professor John Bryant, Dean of the School of Public Health, Columbia Univ.	Aspects of Micro Health Planning in Less Developed Countries
Peter S. Heller, Research Associate, CRED	Health Planning Strategy of the People's Republic of China

(b) Topics in Political Economy

A. Graziani, Professor of Economics University of Rome	Southern Italy
Daniel Levine, Professor of Political Science, University of Michigan	Religion and Political Change in Latin American
J. Samoff and S. Ettinger, University of Michigan	South Africa's Bantustans: Economic and Political Implications
George Wright, University of Michigan	The Decline and Fall of the Coming Revolution in Iran
Gustav Papanek, Harvard University	Pakistan: What Went Wrong?
Richard Bernstein, Brown University	Cuban Agriculture
Carmelo Mesa-Lago, University of Pittsburgh	Economic Development in Cuba, 1959-1970
Trevor Munro, Oxford	Race and Class in Economic Analysis
William Ellis	Capitalist Consolidation and the Exploitation of Africa
S. Ettinger, University of Michigan	Economic and Political Policies in Botswana, Lesotho and Swaziland

(c) Issues in Income Policies, Migration and Employment

Richard Thaler, University of Rochester	The Value of a Life: A Market Estimate
Isevbwa Osayimwese, University of Michigan	Some Issues in Rural-Urban Migration Studies
Terry Monson, Washington State Univ.	Migration, Learning and Infant Indus- tries: A Case Study (Turkey)
George Johnson, University of Michigan	Some Aspects of Wages, Employment and Income Distribution in Kenya
Gerald Boon, OECD	Employment Effects of Housing by Changing Output Mix and Technology Mix

(d) Trade and Development

Tom Hutcheson, University of Michigan	Development Problems in Colombia
Robert M. Stein, University of Michigan	Discussion of "The Impact of the Commonwealth Preference System of the Imports of the United Kingdom from Latin America"
Bruce Reynolds	Chinese Textiles in Economic Development

Alan Rapaport, University of Chicago	Protective Policies of Panama
Werner Kiene, Michigan State University	Tariffs and Deficiency Payments
Musmuru Rao, University of Chicago	Agricultural Economics, Economic Development, International Trade
Mr.K. O. Knudsen, University of Mich.	Appraisal of McEean Argument on Export Instability
Lucy Cardwell, M.I.T.	Optimal Tariffs in a Linear Programming Model of Chile
Brendan, Horton, M.I.T.	The Effects of Foreign Investment in the Manufacturing Sector

(e) Developments in Francophone Africa

Omar Benmansour, Head of Bureau of Financial and Budget Studies, Planning Secretariat, Moroccan Government	(1) Planning and Planners in Morocco Since Independence
	(2) Recent Development in Morocco and Implications for Planning
Lawrence F. Mansfield, Professor of Economics, University of Miami, Florida	Reflections on Guinea
Claude M. Wauthier, Assistant Chief Editor of the French News Agency of Paris	French Policy Towards Africa
Professor James Nelson, Amherst College	Reflections on Moroccan Transportation Problems
Jacques Berthelot, CRED Research Assoc.	Criteria and Methods Evaluating the Efficiency of Agricultural Cooperatives in LDC's
Germaine Ndjieunde, Visiting Professor from the Cameroons	Economic Development in the Cameroons

(f) Rural Development

Blair Rourke, Lecturer in the Dept. of Agricultural Economics, Univ. of Ghana	Recent Developments in Cocoa Production in Ghana
Gürgen Müdler, Stanford University	Estimating Technical Efficiency on California Farms
David Vail, Bowdoin College	Development Projects Observed: Agricultural Extension Situation Project in Uganda
Peter Weisel, formerly with the Office of National Planning Government of Liberia	Change in Traditional Agriculture in Northern Liberia

(g) Other

Most of the demography interest of CRED staff finds expression in seminars held at the Department for Population Planning. We did have a number of discussions on demographic issues however. Richard Billsborrow, of New York University, gave a seminar on "Effects of Population Growth on Economic Development--A Cross-Section Analysis". And Judy Harrington discussed "Infant and Child Mortality in West Africa".

In conjunction with the Political Science Department, CRED helped offer a series of films on Africa: "South Africa"; "Tanzania: Progress Through Self-Reliance"; "South African Essay I: Fruit of Fear"; "South African Essay II: One Nation, Two Nationalisms".

In April 1972 it happened that there were present in Ann Arbor people who had taught economics in eight different African universities. We took advantage of the occasion to hold a lengthy round-table on "The Teaching of Economics in Africa".

5. Placement of CRED-Associated Doctoral Students

The following students associated with the CRED program, having fulfilled the requirements for the Ph.D. degree in Economics, accepted full-time professional appointments:

Richard Anker	Economist, Demography/Employment, International Labor Organization, Geneva, Switzerland
Stephen J. Ettinger	Economist, Young Professionals Program, World Bank
Gary S. Fields	Assistant Professor of Economics, Yale University
Thomas L. Hutcheson	Economist, Central American and Caribbean Division, World Bank
Robert Posner	Economist, Ministry of Rural Development, Dar es Salam, Tanzania
Ronald L. Silberman	Economist, Urban Institute, Washington D.C.

6. CRED Publications

The preparation and distribution of discussion papers, reprints and reviews by CRED staff makes the product of CRED research internationally available. In 1971/72, 15 items were distributed. This distribution is based on (a) interchange with other institutions active in development economics; (b) distribution to individuals who have requested these papers or who have been involved in CRED programs; and (c) the professional associates of the Center. This distribution was as follows at the end of 1971/72:

Distribution of Discussion
Papers and Reprints

<u>Overseas</u>		140
Institutions	109	
Individuals	31	
<u>United States</u>		64
Institutions	46	
Individuals	18	
<u>Total recipients</u>		204

Items included in the distributions appear in Appendix I. In addition 336 items were distributed in response to specific requests.

7. Conferences

CRED staff attended the following conferences:

<u>Staff Member</u>	<u>Conference</u>	<u>Place</u>	<u>Date</u>
Elliot Berg	African Studies Assoc. Participated in 2 panels: "Ideology Research" and "Ideology and Economic Development"	Denver, Colorado	Nov. 1971
	AID Conference on Popula- tion in Transition	Washington, D.C.	Oct. 1971
Jacques Berthelot	World Conference on Agricultural Cooperatives	Rome, Italy	June 1972
Judith Harrington	Regional Conference of International Union of Scientific Study on Popula- tion; presented paper: "Patterns of Survivorship in Upper Volta and Niger, 1969-70"	Accra, Ghana	Dec. 1971
	AID Conference on Popula- tion in Transition	Washington, D.C.	Oct. 1971
Wolfgang Stolper	27th Congress of the Inter- national Institute of Public Finance	Nurnberg, Germany	Sept. 1971
	Colloquium on Monetary In- tegration & African develop- ment	Montreal, Canada	Oct. 1971

In addition, staff members attended various professional meetings.

8. Award of Research Assistantships and Fellowships

This activity supports the University and Center capability in development with emphasis on Africa. Fellowships are generally awarded to encourage or permit students to pursue studies in development. Research Assistantships contribute to three interrelated objectives of the Center. These are the provision of assistance to senior staff members in support of their professional contribution to the Center; income and employment for graduate students specializing in development and closely supervised professional activity for these same students.

In 1971/72, CRED made 30 awards of Research Assistantships and 8 Fellowships. The term of these awards varied from a few weeks to a full academic year. A total of \$53,776 was spent on this activity, \$28,666 on Assistantships and \$25,110 for Fellowships. Of the 1971/72 total, \$29,646 or 37 per cent was made possible by the grant. The following graduate students received the indicated awards. Those names underlined benefited under the grant.

Award of Research Assistantships and Fellowships

Assisantships

<u>Name</u>	<u>Nationality</u>	<u>Research Area</u>
<u>Bassett</u> , Gilbert	U.S.	World export projections of copper
<u>Boulch</u> , Gerard	French	Bibliographical search on labor migration
<u>Blake</u> , Robert	U.S.	Tunisian Import Policy
<u>Coe</u> , Richard	U.S.	Simulation model of S. Africa's apartheid policy (with Joan Weiss)
<u>Coulter</u> , Theresa	U.S.	Nature, causes & effects of rural-urban migration in LDC's from socio-political-economic point of view
<u>Dietrich</u> , John	U.S.	Evaluation of export projections of cocoa and coffee
<u>Duncan</u> , Greg	U.S.	Review certain issues on integrated industries in LDC's & wages policy
<u>Ehrlich</u> , Everett	U.S.	The concept of the proletariat in Marxist literature
<u>Ettinger</u> , Stephen	U.S.	Economics of the Customs Union between Botswana, Lesotho, Swaziland and So. Africa
<u>Faruqee</u> , Rashidur	Pakistani	Regional disparity with respect to trade problems in Pakistan

Assistantships

<u>Name</u>	<u>Nationality</u>	<u>Research Area</u>
<u>Ghoshal</u> , Animesh	Indian	The impact of small holder rubber on the Liberian economy
<u>Gutierrez</u> , Alfredo	U.S.	Evaluate short, medium & long term forecasts for world coffee consumption
<u>Henning</u> , Peter	U.S.	Foreign exchange earnings for African countries
Hoopengardner, T.	U.S.	Labor migration in the Ivory Coast
<u>Hutcheson</u> , Thomas	U.S.	Effective Protection and Growth
Kjellstrom, Sven	Swedish	Review of research on Moroccan economy
<u>Lukusa</u> , Theophile	Zairis	An evaluation of U.S. assistance to Zaire 1960-70
Martin, Daniel	U.S.	Critique of linear programming model of Tunisian agriculture
<u>Myricks</u> , William	U.S.	Survey of Sources on Third World students in major U.S. Universities
Naranjo, John	U.S.	Effect of commonwealth preferences (of U.K.) against Latin American exports and toward Commonwealth exports
Remy, Dorothy	U.S.	Anthropological study of Nigerian Tobacco Co. workers
Rugyema, Benon	Ugandan	Survey of Michigan resources on Liberian economic theory
<u>Safra</u> , Mongi	Tunisian	Public social expenditures in Tunisia
<u>Senecal</u> , Vance	U.S.	Bibliography on price & investment policies of public enterprises in LDC's
<u>Snapp</u> , Bruce	U.S.	Differences in productivity across nations & regions within countries
Silberman, Ronald	U.S.	Public housing in Kenya
Staelin, Charles	U.S.	Export promotion techniques
Tseggai, Araia	Ethiopian	Plan and budget in Ethiopia

Assistantships

<u>Name</u>	<u>Nationality</u>	<u>Research Area</u>
Weiss, Joan	U.S.	Simulation model of the So. African economy measuring economic effects of discrimination under So. Africa's apartheid policy (with Richard Coe)
Wright, George	U.S.	Regional development in Iran

Fellowships

Blake, Robert	U.S.
<u>Endsjo</u> , Per C.	Norwegian
<u>Fields</u> , Gary	U.S.
<u>Ghoshal</u> , Animesh	Indian
Gibb, Arthur	U.S.
<u>Herman</u> , Barry	U.S.
<u>McDevitt</u> , Thomas	U.S.
<u>Snapp</u> , Bruce	U.S.

9. Library

The CRED Library continued to make its resources available to all faculty and students interested in Economic Development and African Studies. Special effort was dedicated to making these facilities known to the University community. Cooperation and coordination with collections having related objectives was aggressively pursued in order to minimize duplication. As a result of these efforts the Library is providing materials and reference service to an increasingly large number of students and faculty in the schools of Business, Natural Resources, Law, Social Work, Education, Anthropology, Geography, History, Industrial Engineering, Political Science and Population Planning; as well as faculty and students from surrounding institutions (particularly Western Michigan University and Eastern Michigan University) concerned with Third World Problems.

During 1971/72 the Librarian was on leave-of-absence and taking courses in French, Economic Development, and African Studies at Carleton University in Ottawa. The Library staff, therefore, consisted of an Acting Librarian, a half-time secretary and four student assistants.

(a) Acquisitions (Major additions 1971/72)

(1) African government publications

- a. African government documents: 570
- b. New subscriptions to statistical bulletins
 - English: 6
 - French: 4
- c. New subscriptions to other government periodical publications: 19

(2) Microforms

- a. Retrospective runs of French African periodicals:
- b. Out of print African books: 2
- c. Ph.D. dissertations: 5
- d. Microfiche colonial reports:
 - Nigeria 1899-1939
 - Northern Rhodesia 1926-1939
 - Kenya 1904-1938
 - Gold Coast 1895-1939

(3) Books: 698 (emphasis on Francophone Africa)

(4) Working papers

The Center Library has actively pursued exchange arrangements with other Centers and Libraries. The exchange of CRED Discussion Papers and Reprints as well as materials from lists made of duplicate publications received by the Library have brought many valuable materials. These efforts have lead to an exchange of papers and documents with such Centers and Libraries as the U.N. Economic Commission for Africa; National Library of Nigeria; Tanganyika Library Board; University College (Nairobi) Institute for Development Studies; Stockholm University, Institute for Economic Studies. The Library now exchanges with thirty-seven Centers and Libraries and is seeking to expand these contacts further.

(b) Conferences

The Acting-Librarian attended the American Library Association Annual Conference, June 25-July 1, 1972 where information was acquired about Central African Microfilm Project (CAMP). The Library proposes to investigate closer relations with CAMP in the coming year in order to make greater use of their holdings of African materials on microfilm.

b) Assistance to Less Developed Countries

All CRED programs and activities to some extent contribute directly or indirectly - to the understanding or resolution of LDC problems. But for purposes of analysis we here consider separately those programs which most directly involve CRED assistance to LDCs.

1. Technical Assistance to Less Developed Countries

(a) Moroccan Project

Since September 1970, CRED has provided technical assistance to the central planning agency of the Government of Morocco. The purpose of this project is to help improve the planning process in Morocco. The project is a "host country" arrangement, financed mainly by A.I.D. In line with the project plan, two advisors were present during the year 1971-1972, along with several short-term consultants. 24 man-months of advisory services were provided and 11 man-months of short-term consulting services. The following table shows the composition of the advisory group during the period under review.

<u>Advisors</u>	<u>Specialization</u>	<u>Previous Affiliation</u>
John Shilling	International Trade, General Economics	Asst. Prof. of Economics, Boston College
Wayne Snyder	Public Finance, Project Field Director	Visiting Assoc. Prof of Economics, University of Michigan
Willie Van Rijckeghem	General Economist	Prof. of Economics, Brussels University
<u>Research Assistant</u>		
Sven Kjellstrom	Tourism	Ph.D. Candidate, Economics, University of Michigan
<u>Consultants</u>		
Basil Moore	Monetary Policy	Prof. of Economics, Wesleyan University
James Nelson	Transportation	Prof. of Economics, Amherst
Stanislaw Wellisz	Agro-Industries Rural Unemployment	Prof. of Economics, Columbia University

Intensive recruitment activity in the U.S. and Europe allowed the putting together of a larger team for the coming year, when the project is scheduled to reach its peak of activity. Beginning in the fall of 1972, the team will consist of four senior advisors and one "research assistant," a Michigan doctoral candidate who is doing dissertation research and working as an advisor at the same time.

Morocco has gone through two major political traumas since July 1971, and these have influenced the economic planning effort and the work of the Michigan team. The Moroccan authorities have expressed new concern over the issues of equity and income distribution, and team members have been called upon to help in analysis of related fiscal, wage and agricultural policy issues, as well as in more conventional planning work.

Professor Snyder, the project field director, left Morocco in July 1972. On his departure he received a formal citation from A.I.D./Rabat, commending his work. The following excerpts are from the "Recommendation for Certificate of Appreciation".

"While the A.I.D. Honor Awards System is aimed primarily at direct hire personnel, it is hereby proposed that a special presentation of a Certificate of Appreciation be made to Wayne Snyder, team leader of the University of Michigan contract team working with the Secretariat of the Plan...

Mr. Snyder... has performed in an outstanding way... As a result, at the time of his departure this team is making a significant and very useful contribution to elaboration of the next Moroccan Five Year Plan as well as to the training of young Moroccan economists working in the Plan organization... The team has provided some exceptionally useful economic and technical studies... and has been given a training role (working) with a variety of young, well-educated but inexperienced Moroccan economists and statisticians in providing them with practical experience in the planning process..."

(b) Kenya

CRED has cooperated with the Special Rural Development Program, Vihiga Project, of the Kenya Ministry of Finance and Planning. This cooperation, working through A.I.D. and the Florida Agricultural and Mechanical University Technical Assistance Team is mentioned elsewhere in this report. CRED staff have participated in program development in Washington and Kenya. During this collaboration, CRED made available Dr. Peter Weisel, a research associate scheduled to join CRED in the fall of 1972, to join the Vihiga project for two years as a resident evaluator.

(c) Liberia

As has already been mentioned, one new arrangement worked out this year was the placing of Animesh Ghoshal, a Michigan doctoral candidate within the Ministry of Planning and Economic Affairs, Republic of Liberia. At the same time that Ghoshal did research on the Liberian rubber industry, he helped prepare a number of papers and memoranda for the Planning Ministry.

2. Teaching in LDC Universities

The Center was instrumental in providing Professor George Johnson of the Department of Economics, University of Michigan, to University College, Nairobi, Kenya. Associated with this faculty member sent abroad under this Rockefeller financed program was a "Junior Scholar" - Ph.D. candidate who does dissertation research and usually a little teaching. Mr. Gary Fields was in Nairobi under these arrangements, and Mr. Arthur Gibb in Manila. Both were working on employment problems. Fields was studying relations between education and employment. Gibb was working on off-farm rural employment changes associated with agricultural growth.

3. Students from LDC's

The main form of training offered is graduate study in Economics. CRED itself offers no courses or certificates; these are provided within the teaching departments or other units of the University. In addition to the regular teaching that CRED staff members do, CRED's activity takes various forms: 1) The CRED program, particularly its discussion series, offers students participation in policy oriented considerations of LDC problems. 2) CRED acts as advocate within the Economics Department and the University for a more substantial commitment by the teaching departments to students from the less developed world, especially Africa. 3) Through its contacts abroad, CRED helps in the recruiting and screening of candidates for advanced study. 4) CRED provides financial support to graduate students from LDC's, especially Africa, where necessary. 5) CRED provides special forms of assistance to LDC students: counseling, tutoring, provision of research aids, desk space, and a "home" which smooths the adjustment process for the student.

During 1971-72 six students from LDC's were made research assistants, of whom four were African. Four, Faruqee, Ghoshal, Lukusa and Safra, were under the grant. Since most students from African countries come with financing from other sources, CRED support is usually of a supplementary kind designed to allow completion of work underway. No students with other U.S. Government assistance benefitted from the grant.

4. Visitors

The following foreign professionals visited the Center this year:

Benazzou, Chewki M., Director, National Institute of Statistics and Applied Economics, Rabat, Morocco

Benmansour, Omar, Head of Bureau of Financial and Budget Studies, Planning secretariat, Morocco

Chary, Thatha, Registrar and Secretary, National Council of Applied Economic Research, Delhi, India

Chueng-Kuen, Oh, Legislative Counsel, Public Health and Social Welfare Committee, Republic of Korea National Assembly

Foli, Leon, Professor at the Université du Benin, Lome, Togo

Ndjeunde, Germaine, Visiting professor from the Cameroons

c) Assistance to Donor Agencies and Institutions

1. Advisory or Related Services

(a) A.I.D.

(1) Professor Berg and Dr. Harrington attended an A.I.D. conference to consider research ideas on Populations in Transitions -- Migrants in LDC's.

(2) Mr. Pogson served as consultant to A.I.D. and Florida Agricultural and Mechanical University on the special Rural Development Project (Vihiga) in Kenya. (Three weeks - May, 1972).

(b) U.S.I.S.

Professors Berg, Porter, Stern Stolper and Staelin prepared a conference outline at the request of U.S.I.A./Washington on International Economic Interdependence; the specific conference title suggested was: "Recent Changes in the International Monetary System: Implications for Africa." Nothing has come of this so far.

(c) O.E.C.D.

Professor Stolper was consultant on housing and unemployment relationships; conference of consultants held in Paris.

(d) I.M.F.

Professor Stolper lectured at I.M.F. on program budgeting in LDC's.

(e) I.B.R.D.

Professor Berg participated as consultant in I.B.R.D. discussions on employment policies in LDC's.

(f) U.S. State Department

Professor Berg consulted with the State Department on research related to preference systems in LDC's and the multi-national firms in Francophone Africa. He also lectured at the Foreign Service Institute.

2. Assistance in Recruitment.

Throughout the year CRED was consulted by various agencies, in particular A.I.D., leading foundations and I.B.R.D., about candidates for technical assistance missions or other employment.

IV. IMPACT OF GRANT-SUPPORTED ACTIVITIES IN DEVELOPING INSTITUTIONAL CAPABILITIES

In 1971-72 grant funds provided 31 per cent of total CRED disbursements and 56 per cent of the financing of the Center's core activities. The Grant is a major source of CRED's support. Without the Grant CRED would now be operating at a low level of activity and have a correspondingly low institutional impact. In this sense, all of CRED's activity--including those parts not financed directly by the Grant--depend on the institutional financing from A.I.D. We will therefore discuss the influence of the Grant in terms of CRED's general impact. This is in any event inevitable, given the difficulty or impossibility of relating specific sources of financing to the general impact of CRED in developing University institutional capabilities.

The first and perhaps the most basic impact of the Grant has been on the size of CRED staff. Four new Research Associates were appointed in 1971-2, and this new strength not only has allowed a greater level of research activity but has released senior staff time for planning and exploration of possible new activities. The CRED staff is not only larger; it is now more versatile. Within Economics we have added competence in the areas of International Trade, and Public Finance. We added a demographer with West African experience and interests. And the addition of a U.S.-trained Nigerian economist added another dimension; Dr. Izevbuwa Osayimwese will maintain a connection with CRED despite his planned return to a teaching post at the University of Ibadan in 1972-73.

Related to expansion of staff is the fact that a more widespread University commitment to international development is evident. Using resources of the Grant, CRED made a major effort to encourage teaching departments and other units of the University to take on (jointly with CRED) staff members who would be interested in working on African development problems. Extensive discussions were held with the School of Natural Resources, the Departments of Political Science, Sociology and Anthropology, and the School of Education. These and other units of the University were informed that CRED would be interested in financing part-time research appointments. Efforts made to hire a political scientist on these terms were abortive. But a demographer (Dr. Judith Harrington) was appointed jointly with the Center for Population Planning. A country-wide search for an agricultural economist was undertaken resulting with the joint appointment of Dr. Kenneth Shapiro with CRED and the School of Natural Resources effective September 1972.

As a result of Grant funds the high level of activity in teaching and discussion of development problems in the University community continued with an increasing shift of interest to African development problems in particular. Reflecting this 55 informal seminars/group discussions were held at CRED during 1971-72. See III,b,4.

Increased and diversified staff, and the availability of other resources made available by the Grant has allowed CRED to explore new

areas of need for research and other activities.

a) Francophone Africa

The Grant document states that CRED should take special interest in the development problems of Francophone Africa. Reflection, trips, contacts with people knowledgeable about the area led to new ideas about how to provide useful services to Francophone universities and/or research institutes, increase research on Francophone development problems, and strengthen Michigan's general institutional capacity at the same time. Senior staff members took several trips to Francophone countries in 1972, exploring mutual interests and possible areas of need in Francophone universities. The CRED "Francophone University Professor/Researcher" proposal resulted in a supplementary Grant of \$465,000 in June 1972. This new Grant will enormously increase CRED's involvement with knowledge of and general capacity in the Francophone countries economic problems. CRED will provide U.S.-trained economists, speaking adequate French, to the Economics Departments of four universities (Dakar, Abidjan, Yaoundé, Kinshasa). We will also encourage and finance dissertation research on Francophone Africa, bring French-speaking Africans to the U.S. for training in Economics, and encourage research interest in Francophone Africa among Michigan faculty. Library resources on Francophone Africa will also be expanded and Francophone visitors will be brought to Ann Arbor. The experience and contacts that will come out of this program will make for a greatly strengthened research and operating capacity to deal with the problems of that part of the world.

b) Assistance to Other African Universities

As a result of trips through Africa financed by the Grant, and other contacts, CRED staff became aware of acute needs in some African universities for teachers of economics. Knowledge of the demand for economists in African universities was supplemented by knowledge of potential supply which we developed as we did our own recruiting. At the same time, new CRED staff was available to develop the idea of assisting African universities in their recruiting economists. As a result a project proposal was prepared, aimed at providing assistance in recruiting from the American supply of economists, topping off of salary, research assistance, and write-up time upon return from Africa. Despite very encouraging initial response from the Ford Foundation, funding for this project could not be obtained last year.

c) Research Projects

As mentioned elsewhere, three formal research projects were developed during the year: the Harrington-Osayimwese Nigerian Migration project, and the Heller-Grasse LDC Health Care Planning project. At the end of 1971-72 funding for these projects was under consideration. The ability to generate these projects is evidence of our strengthened research capacity.

In addition to the heightened interest of teaching departments in African development, as evidenced by joint recruiting with CRED in several instances, there are other indications of more University involvement. The cooperative spirit with which the central University administration has made more adequate space available to CRED is one such indication. CRED's new facilities are excellent. Also, CRED now shares a number of facilities (library, conference rooms, computer terminal, xerox machine, etc.) with a major University institute, the Institute for Public Policy Studies. The I.P.P.S. is an interdisciplinary center of policy analysis, stressing teaching of the "new" public administration. I.P.P.S. has up to now been oriented exclusively toward domestic problems, but interesting possibilities for cross-stimulation of interests are present.

The strengthening of CRED's library continues. The Grant made available a total 1971-72 expenditure of \$26,000, including salaries. (See III,a,9).

In connection with recruiting efforts in 1971-72 for Research Associate appointments, for possible appointments teaching in African universities, and for French-speaking advisors in the CRED/economic advisory mission in Morocco, CRED screened hundreds of economists/candidates. Some 50 economists were interviewed in New Orleans, at the American Economic Association meetings in December 1971: approximately 15 of these came to Ann Arbor for interviews, presentation of papers, etc. Files have been systematically built up on all of the economists contacted and screened. CRED now has a personnel roster of 875 names as a result. CRED has responded to requests for leads from the Rockefeller Foundation, the United Nations, and A.I.D.

During the year there occurred a basic shift in CRED's strategy of Grant management. The original intent was to expand CRED capacity and research activity by hiring Research Associates on basic three-year appointments. They were to spend one year in Ann Arbor, preparing a research program, a second year in Africa, doing research in the field, and a third year back at CRED, writing up the research. This general approach revealed several weaknesses. Young economists who do not know Africa need more than a year to learn about it sufficiently to define a research project. The stay in Africa under the conditions described is enormously expensive. There are in any event competing demands on the young economist's analytic capacities, and a widespread preference for theoretical work, as against field studies. At the same time it became increasingly necessary in Africa for foreign researchers to become contributing members of universities or research institutes in the country they work in. For these and other reasons, we decided to shift recruiting efforts, by trying to hire people who already have teaching and/or research experience in Africa, and by attempting to place young economists in African Economics Departments or research institutes, providing them with research budgets where necessary, and possibly giving them a short-term appointment in CRED when they have finished their African tour.

Staff expansion and related activity financed by the Grant has permitted one particular initiative which is a spin-off of possible

significance to U.S. domestic problems: collaboration with Florida Agricultural and Mechanical University (F.A.M.U.) at Tallahassee. Professor Elliot Berg and Robert Pogson, CRED Deputy Director, have worked with F.A.M.U. and A.I.D. in the A.I.D.-Vihiga Special Rural Development Program (S.R.D.P.) Late in 1971-72 the CRED Deputy Director was a member of a F.A.M.U. Planning team to Vihiga, Kenya. During this visit plans were made to bring Peter Mook, the S.R.D.P. Vihiga Resident Evaluator to CRED as Research Associate with the understanding that he would be available to assist F.A.M.U. in its implementation of their S.R.D.P. Vihiga Program. All of this is in line with the general A.I.D. objective of strengthening Black university capacity in the development field.

V. UTILIZATION OF INSTITUTIONAL RESOURCES IN DEVELOPMENT

The substance of this section has been extensively treated elsewhere in this report; namely, III. Accomplishments, Sub-sections: a), b), and c).

VI. OTHER RESOURCES FOR GRANT-RELATED ACTIVITIES

During 1971-72, CRED's total expenditures amounted to \$550,225 (See Table 1: Statement of Expenditures from all Sources). Of this amount, \$317,923 was for direct support of the Center including the Grant total of \$167,156 which contributed 52 per cent towards CRED's direct support. The remaining core funds, \$150,137, included a Rockefeller grant and two Ford Foundation grants and the University contribution in kind for offices and telephones.

Additional grants: Rockefeller, \$29,984; CRED/Morocco, \$164,488; and A.I.D./Barlow, \$38,460, totaling \$232,932 were administered by the Center and other than overhead for the University did not contribute to the Center's operating costs. The Rockefeller grant enabled the Center to appoint Professor George Johnson for twelve months at the Institute of Development Studies in Kenya. In administering the CRED/Morocco grant the Center did receive \$28,645 for salaries and supplies. These were direct costs connected with the University of Michigan Advisory Group in Morocco and in reality did not furnish support in the sense that the A.I.D. 211(d) Grant does. The A.I.D./Barlow grant enabled Professor Robin Barlow of the Economics Department to conduct research on the planning and evaluation of health expenditures in Morocco.

The Center was moved in April 1972, to a new location and the University is now providing 14,300 sq. ft. of modern office space at a cost this year of \$13,118 and local telephone services and installation costs of \$2,818 as well as administrative services.

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Table I.

Statement of Expenditures from all Sources

	<u>CRED/ Rocke- feller 330320</u>	<u>Rocke- feller 362090</u>	<u>Ford 364310</u>	<u>Ford 2 year 364290</u>	<u>AID 211(d) 034630-40</u>	<u>CRED/ Morocco 003160</u>	<u>AID/ Barlow 010575</u>	<u>U of M Contri- bution</u>	<u>Total</u>
Salaries		13,576		72,138	96,054	109,425	24,605		315,798
Students		6,600	1,052	14,348	29,646				51,646
Travel		4,808	225	11,318	16,213	10,059	630		43,253
Library					12,230				12,230
Supplies	12,766		11,531		13,013	10,799	185		48,294
Other ¹								15,936	15,936
Overhead		<u>5,000</u>		<u>10,823</u>		<u>34,205</u>	<u>13,040</u>		<u>63,068</u>
	12,766	29,984	12,808	108,627	167,156	164,488	38,460	15,936	550,225

¹ Office Rental \$13,118; Telephone Rental (and installation costs at new building) \$2,818.
(Two months in new bldg and ten months in old bldg.)

VII. NEXT YEAR'S PLAN OF WORK AND ANTICIPATED EXPENDITURES

This outline of next year's plans will be framed in the same form used to describe CRED's 1971-72 activities; i.e., activities will be grouped in three general categories: university capacity, assistance to LDC's, and assistance to donor agencies. Estimates of expenditures are given where possible.

a) Strengthening University Capacity

1. Personnel.

A continuing effort will be made to recruit new personnel, and to further develop CRED's registry of development specialists for use by others. In 1972-73 we will repeat the 1970-71 approach, with certain refinements: review of Ph.D. candidates in Economics in U.S. graduate schools; interviews at the American Economic Association meetings in Toronto in December 1972; interviews in Ann Arbor for promising candidates. We will make special efforts to find suitable new staff from among people returning from teaching or research assignments in Africa. Efforts to induce other units of the University to make joint appointments with CRED will be continued. One new departure in hiring strategy will be an attempt to hire specifically for given research assignments which we believe to be of high priority -- e.g., aspects of intra-African trade; topics in employment policy. We also plan to send one or two newly-hired research associates to France for French language training, whether for ultimate use in the Francophone University project or more generally. Overall numbers to be hired will depend on such factors as whether suitable candidates can be found, and the ability of other units in the University to make joint appointments. It is anticipated that salaries and employee benefits of from four to six new personnel will range between \$62,000 and \$93,000.

2. Teaching.

Three new departures are planned in the teaching area, although there is uncertainty as to whether they can be fully realized:

(a) The first is a substantial tutoring effort for graduate students from LDC's in the Michigan Economics Department. It is certain that some part of the high attrition rate among these students is due to a lack of specialized assistance -- the absence of attempts to diagnose their academic problems and to do something about those problems. We intend to ask LDC students what we might do to help, and if tutoring assistance is asked for, we will provide it. Estimated cost of this activity is \$6,000.

(b) For some time we have been preoccupied with this problem of high attrition among Economics Ph.D. candidates from LDC's, and about the overall problem of the supply and training of economists. CRED would like to undertake a general study of these problems, particularly for

African economists. A first step, which we want to start next year, would be a study of enrolments of LDC students in Economics in U.S. graduate schools, the record of performance of these students in the past decade, special programs which exist to deal with attrition problems, if any. Estimated cost: \$7,000 (one man for four months, plus travel and assistant).

(c) A number of LDC students have suggested that we set up a workshop in the techniques of development planning, which could be done in the summer of 1973. We plan to explore the demand for such a workshop and the possibility of finding someone good to teach it. Estimated cost: \$4,500.

3. Research.

Research focus will be along the following lines: migration in West Africa (commencement of project on demographic-economic aspects of migration in Nigeria); export promotion (further development and discussion of project on export promotion analysis and techniques, and commencement of research); health planning (aspects of health economics and health planning in Morocco, and in China); rural development aspects of agricultural development in Kenya, Tanzania, and the Ivory Coast; special case studies (study of the development and planning experience of Tunisia; aspects of Ivory Coast development; growth and development in Liberia; dissertation research: The Liberian Rubber Industry; Economics of the South African Customs Union Area, from the point of view of Botswana, Lesoto, Swaziland; Effective Protection in Colombia; Productivity in Nigerian Manufacturing; Aspects of Labor Migration in the Ivory Coast. Staff salaries are related research expenditures under 211(d). All are estimated to be around \$100,000.

4. Library Development.

During the coming year the Library will be installed in new quarters, requiring converting office area to library use as well as shelving, cabinets. The Francophone material will be built up. New and better equipment will be purchased -- e.g., a microfiche reader-copier. This total program is estimated to cost \$33,000 including conversion costs borne in whole or in part by the University. Costs imputed to 211(d) are \$23,000.

b) Assistance to IDC's

1. Morocco.

The Morocco advisory mission will be at full strength by September 1972. Project management should not make great demands on CRED staff. Some planning efforts will be necessary for consultants in 1973, and if the project is to continue past December 1973, recruiting of additional advisors will be necessary. Early next year decisions will be taken on whether to extend the project and if so in what form. Costs of this program

in 1972-73 will run around \$300,000, financed entirely from the Morocco Project budget.

2. Assistance to Francophone Universities

Under this program we hope to have four economists in place -- one each -- in the universities of Dakar, Abidjan, Youandé, and Kinshasa; one dissertation research student in the Ivory Coast; one Francophone visitor; one special graduate fellow, several Michigan faculty working on small Francophone-encouraging grants. These expenditures will be carried on the Francophone Africa, supplementary 211(d) budget. Costs of the first phase of this total program (1972-73) are estimated (very approximately) at \$100,000.

3. Elaboration of full Francophone professor/research project

The program approved in June 1972 by A.I.D. was only part of a larger project, which has to be redefined, and resubmitted by A.I.D. during the year 1972.

4. Assistance to other African Universities or Research Institutes

CRED will make its personnel register, consisting of economists in overseas development work, available to Economics Departments of African universities, and will assist interested universities in finding economist-teachers or researchers. Also, CRED will make available a Senior Research Fellow to the Institute of Development Studies, Nairobi; this appointment will be carried on the Rockefeller Program. The total cost of this program will be \$38,000, to which \$8,000 is carried on 211(d).

c) Assistance to Donor Agencies

This covers general costs not otherwise financed attributable to assistance with recruiting (e.g. personnel register), consultancies or missions, or discussions which are not covered or specific project financing. Included are discussions with A.I.D. on Vihiga and other programs; with the World Bank or U.N. on other proposed programs and projects, etc. Estimated cost: \$15,000.

VIII. REPORT OF EXPENDITURES

The total Grant amounted to \$675,000. Through the end of the fiscal year 1971-72, \$286,796 or 42 per cent was expended. See Table II: Statement of Expenditures, January 1 through June 30, 1972.

Projected expenditures for the balance of the Grant, \$388,204, for the years 1972-73, 1973-74 and 1974-75 are detailed in Table III: Expenditure Report.

The Grant's main categories for 1971-72 actual expenditures with a comparison of the estimated expenditures for 1971-72, given in the previous (Second) Annual Report follow:

	<u>Projected</u>	<u>1971-1972</u> <u>Actual</u>
Personnel	\$ 91,000	\$ 96,054
Students (Fellowships and Res. Assistantships)	28,000	29,646
Travel	14,000	16,213
Library	8,000	12,230
Supplies, etc.	<u>14,000</u>	<u>13,013</u>
	\$ 115,000	\$ 167,156

A detailed breakdown of the 1971-72 expenditures is provided in Table IV: Detailed Statement of Expenditures.

Table V: Distribution of 211(d) Grant Funds and Contributions From Other Sources of Funding offers a rough breakdown of all CRED expenditures in 1971-72 by function.

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Table II.

Statement of Expenditures, January 1, 1970 through June 30, 1972

211(d) Grant, US-AID/csd-2547
(Accounts 034630 and 034640)

	<u>Five Year</u> <u>Grant</u>	<u>1969-1970</u>	<u>1970-1971</u>	<u>1971-1972</u>	<u>Total</u>
Personnel	\$ 382,500	11,324	53,633	96,054	161,011
Students Fellowships & Res. Assts.	140,000	4,924	24,792	29,646	59,362
Travel	53,000	673	4,938	16,213	21,824
Library ¹	52,600	3,206	9,205	12,230	24,641
Supplies, etc.	<u>46,900</u>	<u>3,075</u>	<u>3,870</u>	<u>13,013</u>	<u>19,958</u>
Total	\$ 675,000	23,202	96,438	167,156	286,796

¹Acquisitions only, Salaries in Personnel.

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Table III.

Expenditure Report
(Actual and Projected)

Under Institutional Grant No. AID/csd-2547

Review Period: July 1, 1971 to June 30, 1972

	<u>Total Grant</u>	<u>Expenditures to Date</u>		<u>Projected Expenditures</u>			<u>Total</u>
		<u>1971-1972</u>	<u>Cumulative Total</u>	<u>1972-1973</u>	<u>1973-1974</u>	<u>1974-1975</u>	
Salaries	382,500	96,054	161,011	81,840	75,000	64,649	382,500
Students	140,000	29,646	59,362	22,000	35,000	23,638	140,000
Travel	53,000	16,213	21,824	20,000	7,500	3,676	53,000
Library	52,600	12,230	23,458	10,000	12,000	7,142	52,600
Supplies	<u>46,900</u>	<u>13,013</u>	<u>21,141</u>	<u>12,100</u>	<u>9,000</u>	<u>4,659</u>	<u>46,900</u>
	675,000	167,156	286,796	145,940	138,500	103,764	675,000

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Table IV

Detailed Statement of Expenditures

211(d) Grant, US-AID/csd-2547

(Account 034630)

Salaries

Academic	\$ 31,684	
Administration	16,340	
Research Assistants	13,986	
Librarian	6,759	
Secretarial/Clerical	27,342	
Library Aides	4,945	
Employee Benefits	8,834	
Followships	15,660	
Lecturers	150	
Computer Center	1,084	
Supplies	4,408	
Telephone/Cable	1,146	
Postage	489	
Equipment	5,037	
Travel	<u>16,213</u>	\$ 154,077

Account 034640 - Library

Library Acquisitions	12,230	
Supplies	282	
Equipment	<u>567</u>	<u>13,079</u>
Grand Total		\$ 167,156

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Table V.

Distribution¹ of 211(d) Grant Funds and Contributions From Other Sources of Funding

<u>Grant Related Activities</u>	<u>Period Under Review</u>	<u>Cumulative² Total</u>	<u>Projected 1972-1973</u>	<u>Projected to End³ of Grant</u>	<u>1971-1972 Non 211(d) Funding Amount</u>
Research	120,000		84,000		202,000
Teaching ⁴	-		-		-
Libraries	26,000		23,000		-
Consultation ⁵	15,000		15,000		
Publication	6,000		9,000		
Other	-		-		<u>181,000</u>
Total	167,000		131,000		383,000
Grand Total: \$550,000					

¹This distribution by function is based on a rough approximation. As has been noted elsewhere the introduction of a supporting accounting system based on program and function is a target for 1972-1973.

²Distribution by function has not been made for prior years.

³This item includes the CRED/Morocco Advisory Project and the cost of office space provided by CRED by the University. For the purposes of this rough estimate all other funding is divided as shown above.

⁴Formal teaching is carried on by CRED staff financed by the Department of Economics. This activity occupied one-half the time for the academic year for Professors Berg, Heller, Porter and Stolper. Its cost is not reported here.

⁵Services rendered to LDC's and Donors in the United States.

APPENDIX 1

CRED Publications

Discussion Papers and CRED Reprints 1967/68-1971/72

1967-1968

Discussion Paper 1, Elliot J. Berg, "Wage Structure in Less Developed Countries," January 1968.

Discussion Paper 2, Peter Eckstein, "Accounting Prices as a Tool of Development Planning," February 1968.

1968-1969

Discussion Paper 3, Wolfgang F. Stolper, "Economic Growth and Political Instability in Nigeria: On Growing Together Again," November 1968.

Discussion Paper 4, Elliot J. Berg, "Industrial Relations Systems in Colonial West Africa: A Comparative Analysis of French West Africa and the Gold Coast," December 1968.

Discussion Paper 5, Elliot J. Berg, "Trade Unions and Wage Levels-- The Nigerian Case," January 1969.

Discussion Paper 6, Richard C. Porter, "Some Implications of Post-War Primary Product Trends," February 1969.

CRED Reprint 1, Jerome C. Wells, "Nigerian Government Spending on Agricultural Development: 1962/3-1966/7," *The Nigerian Journal of Economic and Social Studies*, November 1967.

CRED Reprint 2, Elliot J. Berg, "Major Issues of Wage Policy in Africa," *Industrial Relations in Economic Development* edited by Arthur M. Ross, Macmillan, 1965.

1969-1970

Discussion Paper 7, Peter Eckstein, "Quantitative Measurement of Development Performance: A Critique by Peter Eckstein and a Reply by Irma Adelman and Cynthia Taft Morris," April 1969.

Discussion Paper 8, Richard C. Porter, "The Effectiveness of Tax Exemption in Colombia," July 1969.

Discussion Paper 9, Peter Eckstein, "Toward an Integrated Theory of Tariffs," August 1969.

Discussion Paper 10, Wolfgang F. Stolper, "Limitations of Comprehensive Planning in the Face of Comprehensive Uncertainty: Crisis of Planning or Crisis of Planners," October 1969.

1969-1970 (cont.)

CRED Reprint 3, Polly Hill, "The Myth of Amorphous Peasantry: A Northern Nigerian Case Study," *The Nigerian Journal of Economic and Social Studies*, July 1968.

CRED Reprint 4, Elliot J. Berg, "Urban Real Wages and the Nigerian Trade Union Movement, 1939-60: A Comment," *Economic Development and Cultural Change*, July 1969.

CRED Reprint 5, Wayne W. Snyder, "Turkish Economic Development: The First Five Year Plan, 1963-67," *The Journal of Development Studies*, October 1969.

CRED Reprint 6, Polly Hill, "Hidden Trade in Hausaland," *MAN*, Vol. 4, No. 3, September 1969.

CRED Reprint 7, John F. Weeks, "A Comment on Peter Kilby: Industrial Relations and Wage Determination," *The Journal of Developing Areas*, Vol. 3, No. 1, 1969.

CRED Reprint 8, Wayne W. Snyder, "Measuring the Effects of Belgian Budget Policies," *Cahiers Economiques de Bruxelles*, No. 44, 1969.

CRED Reprint 9, Wolfgang F. Stolper, "The Long Term Economic Development of Germany," (review article of *Das Wachstum der Deutschen Wirtschaft* by Walter G. Hoffman) *Weltwirtschaftliches Archiv*, Vol. 103, No. 2, 1969.

CRED Reprint 10, Robert M. Stern, "International Financial Issues in Foreign Economic Assistance to the Less Developed Countries," *Economic Development and Structural Change* edited by Ian G. Smith, Edinburgh University Press, 1969.

CRED Reprint 11, Wayne W. Snyder, "Money in a Developing Economy: A Reappraisal," *The Review of Economics and Statistics*, Vol. LII, No. 1, February 1970.

1970-1971

Discussion Paper 11, Richard C. Porter, "Birth of a Bill Market," August 1970.

Discussion Paper 12, Isaac Ayinde Adalemo, "Distribution of Market Centers, Market Periodicities, and Marketing in Northwestern Nigeria," August 1970.

Discussion Paper 13, Elliot J. Berg, "Wages and Employment in Less-Developed Countries," December 1970.

Discussion Paper 14, Thomas L. Hutcheson and Richard C. Porter, "The Cost of Tying Aid: A Method and Some Colombian Estimates," January 1971.

Discussion Paper 15, Rajaona Andriamananjara, "Labor Mobilization: The Moroccan Experience," April 1971.

1970-1971 (cont.)

CRED Reprint 12, Peter Eckstein, "An Econometric Model of Development: Comment," *The American Economic Review*, Vol. LX, No. 1, March 1970.

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APPENDIX 2

A Progress Report on the Professor/Researcher Program in Francophone Africa

The Francophone Africa professor/researcher program is designed to build expertise in the economics of French-speaking Africa through the placing of young U.S.-trained economists in these countries for a period of at least two years. During these two years they will serve as regular members of the faculty of the host university and participate fully in the academic life of the institution: they will carry the same teaching load as their French and African colleagues; and they will undertake research of their own choosing consistent with the guidelines of the host country. At the end of their two years of teaching, the participants will have the choice of remaining for all or part of a third year in Africa to complete his on-going research or of returning to the Center for Research on Economic Development where he may do his writing and develop his ideas with critical assistance from his colleagues at the Center. The Center will also serve as a base from which the young economist, now with valuable teaching and research experience in the field, can reintegrate himself into the mainstream of American academic or official economic life. The host country benefits from the technical competence of these well-trained young economists, their teaching ability, and the research they will do in the field. The academic community in the U.S. will gain economists familiar with the progress and problems of these interesting countries, teachers who have a broad experience in African affairs, and people who are proficient in the French language and available for research, consulting, and teaching throughout the French-speaking developing world.

The project emerged from two trips made by members of the CRED staff to discuss African economic research and teaching problems with heads of departments of Economics and officials of the various Francophone African universities. A recurrent theme in these discussions was the need for economists with a competence in mathematics, econometrics, and economic theory to complement the strong historical, institutional, and legal approach derived from the French system. Representatives of many of the Economics Departments put forward the idea of finding new Ph.D.'s from American graduate schools. We agreed that these were people with the technical competence desired and likely possessing a high degree of enthusiasm and flexibility which would help them adapt well. During these trips and through correspondence the details of a program were worked out with universities in Dakar, Senegal; Abidjan, Ivory Coast; Yaoundé, Cameroun; and Kinshasa, Zaire. This program was developed into a proposal for supplementary financing by A.I.D., in February-March 1972. It was approved by A.I.D. in June 1972.

The first group of young economists was recruited from leading American graduate schools. The first four people are graduates of Yale, M.I.T., Wisconsin, and Minnesota. Limiting our recruiting to the better-known schools facilitates the acceptance of our candidates by the African host universities. It meets the desire of the host countries to have prestigious degrees attached to the good people we send out.

In spite of the difficulty in predicting completion dates for their theses, our candidates have fared reasonably well. The receiving

Special Development Fellowships in Francophone Africa

We have advertised the special graduate fellowship in economic development at all the major universities and black colleges in the United States to attract interested and qualified undergraduates into graduate work related to the Francophone African countries. Recipients of the fellowship must be accepted by the Department of Economics in a regular program leading to the Ph.D. degree. They will work with members of staff having an interest in French-speaking Africa as a means of stimulating their interest in this part of the world, and upon successful completion of their other degree requirements they will be eligible for dissertation fellowships to support their research in a Francophone country.

Currently, we have one candidate for the Ph.D. in Economics at the University of Michigan who is benefitting from a dissertation research fellowship to undertake research on migration in the Ivory Coast.

Francophone Visitors and Student Fellowships

During the month of January 1973, a member of our staff will be making a visit to the participating universities to work out any problems arising from the first wave of personnel we are providing. He will also discuss the possibility of the Economics Departments in question releasing a member of their staff to come to the University of Michigan under the Francophone visitor program, and will recruit qualified students for the 1974-75 academic year. If students can be recruited early in 1973, we could plan for adequate language training at the English Language Institute of the University of Michigan and for enrollment in the special program at the Economics Institute, Boulder Colorado. Correcting deficiencies in English and in the Economics training of the students is essential if they are to succeed in their graduate program. If candidates with some proficiency in English are presented, it should be possible to schedule them for entry in the fall term 1973-74.

Expansion of Interest in Francophone Africa Among University Faculty

An announcement of A.I.D.'s Institutional Development Grant to strengthen the capacity of the University of Michigan faculty to undertake research in the French-speaking countries of Africa has been sent to all members of the Faculty of Social Sciences. We have established a committee to review requests for assistance and to allocate funds. To date, interest in the grants has come from groups as diverse as historians interested in the influence of Islam on political and economic development to a team in the business school interested in the role of multinational corporations in economic growth.

Universities are flexible in setting starting dates, given the way the school year breaks into separate terms. Teachers who arrive at the start of a term can teach a course unit while those arriving mid-term can direct tutorials and seminars. As the program now stands, our candidates will finish their degree requirements and French language training in time to arrive in Africa early in 1973. Our person for Senegal, because of his proficiency in French, will go directly to Dakar in January for the start of the term; the man for Zaire, although possessing a good background in French, will be sent for a refresher course and depending on his progress may arrive anytime between January and March 1973; the man slated for the Ivory Coast is currently in the final stages of his program in Paris and will arrive in Abidjan at the end of December. Finally, our candidate for the Camerouns has begun his French study in France and will be expected in Yaoundé in March or early April. The small delays in placing our men in the field (associated with revisions of their thesis as required by their dissertation committees) does not seem to have affected the enthusiasm of the African universities for our program, and it is evident that our people can make a significant contribution whenever they arrive.

One problem which has arisen is the determination of the teaching load and courses that our people will teach. The teaching load in Francophone universities is a heavy one and our people are expected to carry the same load as their colleagues from France, Canada, or other countries. We will see at a later stage how this will affect their research. A second problem has been the nature of the courses in the French system. It was intended that we should supply people competent in the mathematical and theoretical branches of the discipline as a partial offset to the legal and historical approach common to the conventional courses. In one case, our economist has been asked to teach the more conventional courses and it is a tribute to him that he is able to adapt to teaching four different courses -- capital markets, demography, transport economics, and linear programming after having been told he would probably teach theory and mathematical economics. This is evidence of how short-staffed the Francophone universities are even for conventional courses of the French system and a good indication of the role that adaptable young economists can play in these universities.

Announcement to the Faculty of Social Sciences

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FRANCOPHONE AFRICA PROGRAM

Research Support for University of Michigan Faculty

This Center has recently received an Institutional development grant from the Agency for International Development for the purpose of strengthening the University of Michigan's capacity to do research on the economic development and modernization of the French-speaking countries of Africa. Part of the program is the encouragement of research by existing faculty members.

In order to stimulate interest among faculty members, the program provides for modest grants to University of Michigan Faculty members who want to undertake short term studies broadly related to development and modernization of these countries. The specific activity which could be financed may vary, although a typical case might be financing of a summer research project on a topic related to Francophone Africa. The project could be carried out in Ann Arbor, France, or in Africa according to the type of information sought. Provision may be made for French language training.

The grant does not pay salaries but will provide for language training, travel expenses, overseas per diem allowances, and a reasonable research budget.

Further information about the program may be obtained from Howard Elliott, Research Associate, at the Center for Research on Economic Development, who is handling this program.