AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

April 20, 1988

MEMORANDUM

TO: Mr. Richard E. Bissell, AA/PPC

FROM: Ms. Katherine Blakeslee, AAA/PPC/PDPR

SUBJECT: Current PDPR Research Portfolio

REFERENCE: Request from A/AID

PDPR research focusses on new or cross-cutting issues rather than routine questions. It is designed 1) to develop and apply state-of-the-art approaches to international development assistance, 2) to respond to the needs of the operational bureaus, offices and missions of A.I.D. for guidance on a broad range of assistance issues arising out of the ongoing program, and 3) to review the extent to which established A.I.D. assistance policy is understood and consistently applied. Although some studies or areas of study are ongoing for several years and some are deliberately phased, PDPR does not normally sponsor long-term (5- to 10-year) studies as do some parts of the Agency. Its current policy research program emphasizes the following themes, which are interrelated:

1. The financial, economic, and institutional sustainability of growth and development, including issues of employment, technology and socioeconomic impact of structural adjustment programs;

2. Private sector development, including privatization, credit and financial markets;

3. Agricultural development and rural income;

4. Sound management of environment and natural resources;

5. Human resource development, including education and training, family planning services, child survival, and special issues like AIDS and aging; and

6. Development of democratic institution-building and infrastructure.

This summary does not discuss PDPR activities which are not specifically research in nature, such as the provision of technical electoral assistance, or coordination with DoD and State on implementation of DoD's humanitarian assistance and military-civic action.

1. Achieving Sustainable Economic Growth.

The intellectual foundations of our policy-oriented research on sustainable economic growth are provided in large part through a cooperative agreement with the State University of New York at Buffalo to establish the Institute for the Study of Free Enterprise Systems and a grant with the Sequoia Institute.

The cooperative agreement with SUNY-Buffalo supports serious economic research. On May 27-29, 1988, the Institute for the Study of Free Enterprise Systems will hold a conference on "The Problem of Development: Exploring Economic Development Through Free Enterprise". Papers will be presented by a number of prominent economists. They are Robert King and Sergio Rebelo, both of the University of Rochester; S. C. Tsiang of the Chung-Hua Institution for Economic Research (formerly of Cornell University); Robert Barro, Harvard University; Dale Jorgenson, Harvard University; Paul Krugman, MIT; Paul Romer, University of Rochester; Gary Becker and Kevin Murphy, both of the University of Chicago; and Mark Rosenzweig, University of Minnesota. Discussants will include Jagdish Bhagwati, Ronald Findlay, Stanley Fischer, Arnold Harberger, T.N. Srinivasan and Joseph Stiglitz.

Under our grant to the Sequoia Institute, key development experts (mostly economists) prepare papers on specific topics of special interest to policy makers interested in development. Research papers already have been prepared on policy reform, the informal sector, and trade. Authors are, inter alia, Erik Thorbecke, Elliot Berg, Hernando de Soto, D. Gale Johnson, and Robert Baldwin. Future topics will include financial markets and democratic institutions.

While the intellectual foundations of our research are provided largely by academic economists, the socioeconomic impact of policy changes cannot be properly understood unless those changes are thoroughly grounded in specific country studies. Such an understanding requires the blending of several academic disciplines, notably political science, anthropology and sociology, as well as a knowledge of and sensitivity to unique cultural and historical forces.

A Phase I study of the Socioeconomic Impact of Macroeconomic Adjustment was recently (in FY 88) completed. For some time, A.I.D. has supported a broad range of macroeconomic and sectoral adjustment programs. Some people have expressed concern that the poor majority may be particularly adversely affected by adjustment in the short run. Others argue that the poor will begin to benefit almost immediately through market forces and as government budget allocations are rationalized. In response to these conflicting predictions, we began a study of the socieoconomic impacts of macroeconomic adjustments.

In the first phase, the principal findings were that, generally speaking, the poor were not differentially adversely affected, and in certain countries a reallocation of resources within the society toward a more sustainable growth pattern had begun. Several areas worthy of further study emerged, however: 1) differential effects on vulnerable groups within society are noted according to the pace of the reform (i.e., gradual vs. all-at-once), 2) politically influential parties that may derail a reform can be predicted and planned for in an adjustment program through more rigorous ex ante analysis, 3) specific reform measures can be traced to specific effects (e.g., a trade regime liberalization will likely have the most significant impact on those whose employment and income relies on protected industries) and further refinement of the linkage between types of reforms and specific groups will better guide the selection of types of reform measures to support and the sequencing of those measures, as well as guiding consideration of the need for compensatory programs.

For Phase II (planned to begin in FY 89), a scope of work has been developed to further investigate the points noted above. These investigations will be carried out as field case studies, with regional bureau collaboration and funding. PPC will manage the research and underwrite the comparative summary. This summary will include recommended guidelines for social, economic and political analysis at the design stage of adjustment packages and monitoring of the impacts during implementation. These guidelines will then be modified as necessary, circulated for approval within A.I.D. and incorporated into the non-project assistance guidance.

Technology

Economic growth is critically dependent on technological change (witness the success of the Green Revolution). But economists only recently (within the last decade or so) have begun explicitly to incorporate technological change into their economic models. These "endogenous technical change" or "induced technology" models offer new insights into policy reforms that may stimulate appropriate technological change. The development community, of course, has long been interested in technological change. Much work has been done in the crucially important agricultural sector; more needs to be done. And some work also is required in the non-agricultural area.

We are proposing research to look at issues involved in technological change in agriculture and in manufacturing. One study, on Investment in Dryland vs. Irrigated Agricultural Development (FY 89) challenges the conventional wisdom that, in arid and semi-arid areas of the world, the application of water is the most economically sound approach to achieving food self-reliance and the necessary foreign exchange earning

capacity. In light of the increasing expense of irrigation infrastructure, the availability of more marginal lands for irrigated production, the reduced levels of U.S. bilateral assistance in agriculture, and above all the emergence of drought-tolerant seeds, this conventional wisdom should be re-examined. The study will examine the costs and benefits for investment in irrigated versus dryland agricultural development (including drought-tolerant varietal research as well as direct treatments to the land), and recommend a course of action for the Agency.

In manufacturing, recent technological changes have sharply shifted the production function. Some also have introduced sharp biases the effect of which is to lessen, in some cases dramatically, the advantages accruing to inexpensive labor (the garments industry, in which many specific sub-functions such as cutting with computer-driven lasers rather than by hand, provides a particularly well-known example). Others have introduced sharp biases favoring the location of plants near mass markets (the management technology associated with the Japanese "just-in-time" inventory control systems is a well-known example). Both these types of technological change have the potential for changing the trade and related relationships between A.I.D.-assisted countries and the U.S. We propose to conduct a study on Technological Change and Manufacturing in Developing Countries in FY 89.

2. Private Sector Development.

As part of our effort to persuade missions in A.I.D. and policymakers in developing countries of the importance of relying more heavily on market-oriented (rather than administratively-determined) systems of allocation, we have been supporting, and will continue to support, a number of smaller initiatives in the privatization field. Recently completed studies include:

-- Financing Privatization Under Limited Capital Conditions by Arthur Young & Company (FY 87). This study examines selected issues and approaches related to easing the financing problems associated with privatization in LDCs with weak financial markets and indigenous capital scarcity. The study reviews the LDC problems with foreign ownership and investment in the purchase of parastatals, and the policy issues related to the involvement of foreign ownership and joint foreign- indigenous ownership in capital-poor LDCs; discusses the role of donors in stimulating innovative solutions to financial resource scarcity; and examines the role of leveraged buy-outs, debt-equity swaps, employee stock ownership plans, uncompensated transfer of ownership, and management contracts and leasing to effect privatization with relatively low capital resources by drawing on existing experience in developing countries.

-- Privatization and Employment Policy by The Hay Group (FY 87). This study examines key employment issues that should be addressed in a privatization decision and the administrative steps that should be adopted to ensure that employment problems are identified and resolved. The report looks at the range and complexity of employment issues encountered in privatization transactions [employee dislocation impact, government obligations, and the role of employees], and the potential solutions of employment safeguards and employee benefits protection.

-- Capital Markets and Privatization by The MAC Group (FY 87). This study examines a variety of issues concerned with developing countries' financial markets and their role in fostering privatization and economic growth. The study reviews the major policy problems that have hindered the development of LDC financial institutions; determines the most relevant financial institutions for privatization; and examines the types of support that A.I.D. should provide for financial institutional development.

-- L. Gray Cowan recently completed A Technical Assessment of Privatization (FY 87). This study, sponsored by PPC/PDPR, provides information on the "how-to" of privatization. We also have a current contract with L. Gray Cowan. His study on the Political and Institutional Impediments to Privatization will provide information on the political and institutional obstacles to privatization, and ways to overcome them; employee displacement problems caused by privatization; and techniques for utilizing A.I.D. resources to support privatization.

In FY 88, we will support a study on the Policy Issues and Approaches in Privatizing State-owned Financial Institutions. The purpose of this study is to provide A.I.D. with information necessary to increase its understanding of, and improve its policies and programs on, privatization and financial institutions. The study will (a) examine the costs of extensive government interference in LDC banking systems; (b) describe the benefits of privatizing parastatal banks; and (c) propose policy and related approaches that can be utilized to privatize parastatal banks. The study will be supported by a series of brief case studies.

We also expect to support, in FY 88, a study called Agricultural Marketing Boards and Privatization. This is to be a study of the privatization of the commercial functions of agricultural marketing boards. The study is in response to the popularity (in A.I.D., and especially among Africa missions) of privatization activities in agricultural markets. It will build upon earlier research conducted by PPC/PDPR on agricultural pricing and political stability. The objective of the research is to assist missions' efforts to open agricultural markets by removing from state control those

commercial activities more efficiently placed in the private sector. The process of dismantling marketing boards can cause civil unrest, however, so an element of the study will consider how best to introduce the desired changes.

Financial and Fiscal Systems

Since greater reliance on market systems cannot stimulate more rapid economic growth in the absence of well-functioning financial markets, we also have been conducting a considerable amount of research on financial systems in developing countries. For example, we recently completed:

-- Interest Rate Controls and Financial Repression in Developing Countries by Arthur Young & Company (FY 87). This study discusses why governments control interest rates and the types of mechanisms they use, the effect of these controls on economic growth, and recommendations for interest rate reform and financial liberalization.

-- Tax Policy Reform and Capital Markets Development in Less Developed Countries by Touche Ross (FY 87). This study examines a variety of issues and approaches related to the development of proper tax policies for capital market development. This study identifies the general types of tax laws and policies that impede capital market development in developing countries and new policy approaches for tax reform and economic growth that could remove these impediments. It also focuses on appropriate tax structures for domestic businesses, foreign businesses, and local residents.

-- Alternative Financial Instruments for Less Developed Countries by E.F. Hutton & Company (FY 87). This study examines a variety of issues and approaches related to the development of new financial instruments in developing countries. The study examines policy restrictions that restrain the growth of financial instruments; identifies the policy constraints that prevent LDC private sector banks from engaging in term lending; and develops new policy approaches for the development of instruments that [a] transfer funds among financial institutions and from financial institutions to productive enterprises and [b] encourage LDC banks to undertake term lending.

At present, we are supporting a study of Policy and Institutional Considerations in Equity Market Development by Arthur Young & Co. This study will (a) examine the structure of and policies governing developing country equity markets so that A.I.D.'s programs will be more relevant to the changing needs of developing country financial systems, and (b) develop significant policy options for encouraging equity markets in developing countries.

We also are supporting a study of Tax Policy Reform and Financial Intermediaries in LDCs by Touche Ross and Co. The purpose of this study is to review the tax treatment of financial intermediaries in developing countries, its possible adverse effect on capital markets development, and possible policy design of such taxation to improve the efficiency of financial intermediaries. This study complements the new focus of A.I.D.'s financial assistance, which has moved from credit provision to institutional development of financial intermediaries.

3. Agricultural Development and Rural Income.

Arguably one of the most heavily-debated issues in agricultural development is driven by the neoclassical economic proposition that security of tenure is associated with increased access to rural credit, higher levels of investment, and therefore higher levels of agricultural productivity. Field-based studies of this proposition have been rare and somewhat inconclusive. The links between tenure and, more broadly, land markets in rural areas in developing countries on the one hand and more rapid economic growth on the other must be further explored.

We have two current research activities in this area. The first is called Land Tenure, Rural Credit and Agricultural Productivity in Sub-Saharan Africa. Since 1984, we have worked closely with S&T, LAC and AFR to design a collaborative research program on land tenure security and land markets. Meanwhile, the World Bank has been working independently in Asia (Thailand and China) on the same topic. In 1986, PPC and AFR embarked with the World Bank on a collaborative research program in Sub-Saharan Africa. A.I.D. is supporting three case studies in Ghana, Kenya and Rwanda. These studies will explore the neoclassical economic proposition noted above. The World Bank is providing all management and expatriate research staff and support for the comparative descriptive and econometric analysis done outside the three countries. The outcomes will be 1) a series of policy seminars with African decisionmakers on the linkage between improved tenure security and improved productivity, with options for action, 2) improved internal guidance on the linkage between agricultural development activities and land tenure security, 3) a thorough review of opportunities and constraints to the development of active land markets in Sub-Saharan Africa and 4) a set of policy relevant studies.

The second current research activity is a study of Agrarian Structure. In conjunction with S&T and LAC, we have funded the development of an interactive computer model that will model the agrarian structure (i.e., the distribution of land, labor and capital) in Latin American countries. In addition to the development of the computer program, which will be used in policy dialogue processes, a descriptive analysis of trends

using previously unanalyzed agricultural census data from the 1980s will be completed. The descriptive analysis will serve as the basis for testing and perfecting the computer model. It is also a necessary reference document to contribute to initiatives such as the Bipartisan Commission on Central America.

In FY 89, we expect to pursue this question further in a proposed Comparative Analysis of Land Market Development in Selected LDCs. The research will consist of a secondary analysis of materials generated in country case studies supported by A.I.D. and the World Bank over the past few years. Specific questions regarding the role of land markets in meeting the objective of equitable growth, as well as the requirements for facilitating the functioning of such markets will be explored. Pre-existing conditions, such as the means for improving tenure security, and ancillary requirements, such as credit, will also be examined. The product will be a report detailing the analysis and making policy and programmatic recommendations for both donors and host countries.

Rural Income Growth

Development economists long have known that the growth of family incomes in rural areas depends significantly on non-farm sources. For a variety of well-known reasons, farmers' incomes generally do not rise rapidly; in the aggregate, annual growth rates around 3-4 percent are considered quite good. Accordingly, part-time farming is increasingly recognized as very important to third world economies. This recognition derives not only from the increased non-farm income-earning opportunities in rural areas (and the rise in skill levels to take advantage of those opportunities) but also from farmers' need to diversify their risk. The current research project called Sources of Rural Income explores this little known terrain. The study: 1) identifies rural employment and income sources at the household level; 2) examines the distribution of those households above and below the poverty line, on the basis of a number of socioeconomic characteristic; and 3) arrives at policy priorities for more effective integration of the poor into a productive growth and development process. The study analyzes detailed primary data sets in eight countries. The findings will be used to assess A.I.D.'s allocations in the agriculture account, to guide the development of employment- and income-generating activities, and to provide information for policy dialogue processes in host countries regarding constraints to increasing the growth of the rural economy.

In a related study, we are supporting the Harvard Institute for International Development in its study of The Informal Sector: Policy Reform and Structural Transformation. The informal sector is, in many developing countries, a primary engine of growth and the locus of emerging entrepreneurs. The study

examines institutional factors and proposes policy approaches for assisting informal sector enterprises, both urban and rural.

In FY's 1987 and 88 the Refugee Policy Group (RPG), under a PPC/PDPR grant, examined specific income-generating projects and other economic activities involving refugee women. RPG, an independent center for policy analysis and research on international and domestic refugee issues, undertook a five-week field study in Sudan's eastern region focussing on Eritrean and Ethiopian refugee women. RPG staff also visited refugee settlements and met with international refugee assistance specialists in Central America, Pakistan and Southeast Asia. The study was a continuation of an earlier PPC grant which analyzed issues facing refugee women in the Third World. It identified policy and program initiatives which could help ensure equitable and appropriate access by women to refugee assistance and the kinds of research efforts needed to further these objectives.

Beginning a few years ago, PPC/PDPR has successfully led the Agency in an examination of Regenerative Agriculture methodologies and practices, the experience and expertise of the Rodale Research Center and Rodale Institute, and the potential contribution of these to international development programs. In 1987, with the collaboration of AFR/TR and USAID/Kenya we provided funding for the first year of a five-year effort by Rodale International to establish a Kenya Regional Information Exchange Network (KRIEN) for regenerative agriculture, which is designed to adapt, test and promote regenerative, or low-input, sustainable agriculture in Kenya and surrounding countries. USAID/Kenya has assumed responsibility for carrying the Kenya program forward, and S&T/AGR is supporting continued Rodale-led research on legumes and vegetables.

4. Environment and Natural Resource Management.

PPC/PDPR sponsors research on environmental and energy issues. The interaction between the environment and development is extremely complex; we try to capture some of that interaction by describing A.I.D.'s charge as one of promoting sustainable, broad-based economic growth in developing countries. The link between energy and economic development is more direct: inadequate commercial energy supplies clearly constrain economic growth.

Natural Resource Management

For example, in The Greening of Africa study we collaborated with the Africa Bureau to provide funding to the International Institute for Environment and Development for a study examining successful approaches to natural resource management in

Africa. The book has just been published in the U.S. It is too early to know how the study ultimately will affect A.I.D. programming or the policies of the countries we work with in Africa.

Current research includes a study by Robert Repetto of the World Resources Institute called Economic Policy Opportunities to Slow the Rate of Tropical Deforestation. This study is jointly funded by PPC/PDPR, S&T/FNR and the World Bank. The report will be published later this year. We also are funding five grants designed to explore the linkages between population growth and natural resource management in Africa. No results are yet available.

This year we expect to fund a number of studies under the heading Policy Reform and Natural Resource Management in Sub-Saharan Africa. Jointly with the Africa Bureau, we are now soliciting proposals for studies examining how existing policy reform efforts affect natural resource use. We are interested in learning more about the policy options that may be included in policy reform packages, options that would better assure the protection and improved management of natural resources.

Biodiversity

PPC/PDPR also is responsible for designing and managing biological diversity research activities. Current research activities include:

-- Methods to Monitor and Evaluate Biodiversity Activities (National Academy of Sciences). As A.I.D. increases the number of projects designed to enhance biological diversity, the Agency must have the measure the effects of these activities. This project will define the parameters, conditions, and procedures necessary to properly monitor and evaluate the effectiveness of A.I.D. interventions designed to conserve biological diversity. The expected output will be clear and useful guidance on how to implement appropriate monitoring and evaluation schemes. The project should be completed in late November or early December 1988.

-- Economic Incentives and Disincentives for Preserving Biological Diversity (International Union for the Conservation of Nature and Natural Resources). A.I.D.'s biodiversity projects will be successful only if the economics of diversity is understood and incorporated into project design. PPC has funded IUCN to examine economic incentives and disincentives for preserving biological diversity. Two major goals of this project are to 1) understand how government policies create incentives or disincentives for activities affecting biological diversity; and 2) determine ways and means that economic incentives/disincentives can be used to promote activities which contribute to conserving biodiversity. The expected

output is a concise guide on how to build such socio-economic and fiscal measures into project design. The final guidelines should be distributed in August or September 1988.

We plan to fund two projects in FY 88 from the Agency's biodiversity commitment. These projects have been approved by the Biodiversity Working Group.

-- Demonstrating the Use of Economic Incentives for Conserving Biological Diversity in Thailand (International Union for the Conservation of Nature and Natural Resources). This project would allow for on-the-ground implementation of the recommendations contained in the Guidelines resulting from the current IUCN project described above. The proposed project is a unique opportunity to have senior government officials come together to discuss implementing the cross-sectoral policies which are necessary to promote the preservation of biodiversity. USAID/Jakarta has strongly endorsed the project, as have some government officials in informal conversations with the grantee.

-- Preservation of an Endangered Marine Mammal in Mauritania: Policy Implications for Preserving Biological Diversity in Developing Countries (Tethys Research Institute). Mauritania has one of the last stable populations of the Mediterranean Monk Seal, the most endangered marine mammal in the world. In contrast to the stable situation in Mauritania, seal populations are diminishing rapidly in the waters of developed Mediterranean countries. This activity would examine how a combination of policies and social, economic, and political conditions have affected, in one case, the preservation, and in another case, the near extinction, of the remaining populations of an endangered species. The goal is to extract general principals from this natural experiment to better understand policies and approaches to preserving biodiversity which are consistent with the primary goal of promoting economic growth.

Energy

The Energy Supply and Use in Developing Countries: A Fresh Look at Western *(OECD) Interests and U.S. Policy* Options study was jointly funded by S&T/EY and PPC/PDPR. It was prepared by a panel of experts assembled by the Atlantic Council and the World Energy Conference. The report focussed principally on policy constraints to increased international and/or domestic private sector participation in the energy sectors of developing countries. The results of the study have been useful in focussing our policy dialogue efforts and probably have helped shift our energy programs towards the private sector (e.g., the private power generation issue).

5. Human Resource Development.

Several research and policy analysis themes have become intertwined. First, the family has become the unit of analysis for a range of development behaviors and effects. Analysis of intra-household distribution of income and other goods and responsibilities is essential for understanding how different growth strategies affect average well being. Second, analysts have begun to broaden from sectoral to cross-sectoral concerns with interaction of health, nutrition, family planning, education and other factors on each other. Third, there is increasing attention to the early childhood years, from many perspectives -- child survival; child spacing and the decisions made with respect to family planning; health interventions such as immunizations; early childhood development and the transition to school ...

These are combined within PDPR in the research theme "Family Choices for Children." We supported a first inquiry in FY 1986/1987 through the International Center for Research on Women (ICRW). Despite much interest among researchers, it was our judgement that the research was developing in an overly academic direction without sufficient relevance to program design issues other aspects for which guidance may be needed. Consequently, we did not implement the field research phase. However, it continues to be a theme of considerable interest and PDPR continues to look for ways to explore it further.

Education and Training

PDPR commissioned a study by Institute for International Education (IIE) and SUNY/Albany comparing Sponsored and Nonsponsored Foreign Students in US universities in terms of type and level of financial sponsorship, socio-economic characteristics, field of study and type of university, etc.. The research grew out of the observation in the IIE data base Open Doors that at least for some countries students sponsored by their own governments or coming on family or other private resources were at least as likely as A.I.D.-sponsored trainees to be female and to study in development-related fields. Less was known about socio-economic characteristics, return rates or the degree to which the type or level of financial assistance had affected choice of field or university. The research is completed and the report is expected to be available for circulation this summer. However, there were major data problems and non-response to surveys; the report is not as useful as hoped. We may want to explore the issues of level and type of sponsorship further; at least for some countries it may be both necessary and desirable to move to partial funding rather than full funding and to shift from scholarship assistance to technical assistance in helping countries improve their own systems for external training.

Health

A study of the Costs and Coverage of Immunization is designed to develop a policy issues framework within which the interrelationship among immunization program strategies, financing, and coverage levels can be examined. This should provide information on the level of balance possible between Agency policies to encourage increased immunization coverage while containing recurrent costs. Spin-offs to A.I.D. programs include a better understanding of the cost-effectiveness of different immunization strategies and suggestions for the appropriate mix of strategies for particular countries.

PDPR is providing partial support to the design and presentation of a computerized model on the Socio-economic and Demographic Impact of AIDS. This exercise will assist A.I.D. to assess the impact of AIDS on a country's political, economic and social structure, so as to adequately review and develop A.I.D. policies and sector interventions.

Family Planning

At present, the evaluation and monitoring of A.I.D.'s contraceptive marketing program relies on private-sector market research (e.g. focus groups, intercept surveys) and traditional social science research (e.g. contraceptive prevalence surveys.) To assist A.I.D. in assessing how much more A.I.D. may want to rely on private-sector marketing techniques, PDPR has ask a private-sector market researcher to share the private sector's experience with making program decisions by using market research techniques exclusively.

PDPR is initiating a research project called "Balancing Policy Objectives in Family Planning" to investigate how the population policy objective of improving access to family planning, in this case Voluntary Surgical Contraception (VSC), can be coupled with sustainability objectives. The potential role of private sector provision of VSC will be addressed as part of the study. The results will assist Agency program designers attempting to balance sector-specific goals with general financial and institutional objectives.

6. Democratic Institution-Building.

PDPR commissioned a study with the Hoover Institution in FY'87, as the second part of a three-year project to study democracy in developing countries. The research will focus on what steps should be taken to enhance a democratic infrastructure within the context of obstacles and constraints facing democratic nations. A follow-on research project will examine the inter-relationships and linkages between economic growth and democratic stability or freedom.