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SMITHSONIAN INSTITUTION

MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

Submitted as a supplement to the FY 1984 budget

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SMITHSONIAN INSTITUTION MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

PROGRAM PURPOSES AND LIST OF GRANTS

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MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

PROGRAM PURPOSES AND LIST OF GRANTS

INTRODUCTION

The Smithsonian Institution's Special Foreign Currency Program makes grants in United States-owned foreign currencies to United States institutions, including the Smithsonian itself, to conduct research projects in the so-called "excess" foreign currency countries. In FY 1982, the "excess" foreign currency countries were Burma, Guinea, India, and Pakistan. The Smithsonian program supports research in Archeology and Related Disciplines, Systematic and Environmental Biology, Astrophysics and Earth Sciences, and Museum Programs.

The Smithsonian Foreign Currency Program awards grants when applicants have fulfilled three requirements. These are: 1) the favorable recommendation by a national advisory council of qualified scholars; 2) the concurrence of the appropriate American embassy and host government overseas; and 3) the completion of appropriate cooperative arrangements with host country institutions.

This supplement to the Institution's FY 1984 appropriation request describes: 1) the Smithsonian Foreign Currency Program within the context of the basic Smithsonian purpose; 2) some of the program's achievements; 3) its goals for FY 1984, and 4) projects for which obligations were incurred during FY 1982.

THE GLOBAL NATURE OF THE SMITHSONIAN'S CHARTER

The purpose of the Smithsonian Institution is "the increase and diffusion of knowledge." This quotation from the will of its founder, James Smithson, was made part of the Institution's enabling legislation enacted by the Congress in 1846, chartering the Institution and leading to the eventual designation of the Institution as the custodian of the National Collections.

The Smithsonian's first Secretary, Joseph Henry, implemented the charter through support of basic research and publication not only in Washington but through a global network of correspondence devoted to these same ends. At the same time, the Institution began to acquire substantial collections of biological and geological specimens and of archeological and ethnographic materials, derived both from its own research and from U.S. Government programs. The Institution continues to conduct research and education programs and to improve its collections. Today the Institution is acknowledged to be a major national resource for the study of natural and cultural history and to be without equal anywhere on earth.



THE FY 1984 APPROPRIATION

For FY 1984, the Smithsonian requests an appropriation of \$9,040,000 equivalent in foreign currencies which have been determined by the Treasury Department to be in excess of the normal needs of the United States. This appropriation will be used to continue a program of grants to United States institutions for research in those countries where excess local currencies are available. Of the total requested, \$2,700,000 will be available for continuing projects and \$1,300,000 will support new projects. The appropriation request includes \$4,000,000 equivalent in Indian rupees for the third installment to the forward-funded reserve in support of future programs of the American Institute of Indian Studies. The request also includes \$1,040,000 equivalent in Pakistani rupees for the second of four increments of a U.S. contribution for the restoration and preservation of Moenjodaro in Pakistan.

Special Foreign Currency Program Appropriations and the U.S. Taxpayer

An appropriation for this program does not add to the tax burden of Americans because the money used for foreign currency grants comes from U.S. holdings of foreign currencies abroad in existing accounts that were established in connection with the "Food for Peace" (P.L. 480) program. These accounts were generated largely through sales of surplus U.S. agricultural commodities abroad in exchange for local currencies. In cases where these are greatly in excess of the projected normal U.S. needs, the Treasury Department designates them "excess foreign currencies." They then become available through the Special Foreign Currency Program appropriation process for U.S. uses like scientific research.

Erosion of these accounts by inflation is in many countries dramatically reducing their value to the United States. The Indian rupee has lost, for example, more than half of its value since 1970. As a consequence, when a worthy use of these excess currencies can be identified through programs like the Smithsonian Foreign Currency Program, the U.S. can effectively employ at least some of these currencies before inflation effectively eliminates their usefulness.

PROGRAM OF GRANTS FOR RESEARCH

The purpose of the Smithsonian Foreign Currency Program is, like that of the Institution itself, "the increase and diffusion of knowledge." The Smithsonian Foreign Currency Program supports this purpose by making grants to United States universities, museums, and other institutions of higher learning, including the Smithsonian itself, primarily for research and advanced professional training in fields of traditional Smithsonian competence. An appropriation of \$4,000,000 equivalent in excess foreign currencies is sought for these grants.

The Smithsonian program is a major source of excess foreign currency support for research carried out by United States institutions in the excess



currency countries. The Smithsonian program is distinguished from other Special Foreign Currency Programs in that the full responsibility for the design, execution and publication of research results rests with a scholar working within the program of a United States institution.

The Smithsonian program strengthens the research and training activities of collaborating institutions abroad, for most projects directly involve host country institutions and scholars. Enduring professional ties which result from joint efforts and scholarly exchange contribute to the strongest form of United States cultural relations with other nations. These ties contribute to the integration of the worldwide advancement of science which serves to narrow the gap between the industrial and the developing nations.

The Importance of Research in the Natural Sciences and Cultural History

The density of world population and the impact of technological development make it important to understand their effect on the natural environment and on society. Research sponsored by the Smithsonian in the natural sciences and in cultural history is aimed at improving understanding of the environment, of the management and protection of scarce resources, and the cultural setting within which social changes take place.

Grants awarded by the Smithsonian in systematic and evolutionary biology have contributed to the understanding of the individual and the surrounding environment. In FY 1982, grants supported the following projects of special interest:

- --Paleontological investigation in Pakistan has led to the discovery of the oldest and most primitive whales known to science.
- --Elucidation of the zoogeographical, biological, and parasitological relationship of numerous species of the genus <u>Bulinus</u>, an intermediate host of the blood fluke which causes one of man's most serious parasitic diseases, urinary schistosomiasis, has contributed to the development of biological controls for the disease vectors.

In astrophysics and earth sciences, contributions were made to the study of the earth and its management. For example:

--Examination of marine fossil deposits in central Tunisia have made possible the dating of important vertebrate events such as the arrival of the horse in North Africa.

Smithsonian grants in cultural history and in museum programs contribute to the understanding of the individual and society and foster understanding of diverse cultures. In FY 1982, grants supported the following projects:



- --Extensive field work on non-standard Burmese languages has resulted in the development of a trilingual dictionary which will be used for language teaching in the Burmese school system which is reintroducing the serious use of English to the system.
- --Excavations at Wadi Kubbaniya in Egypt uncovered a wellpreserved human skeleton of the Middle Paleolithic, some 60 to 80,000 years old, which has been declared a national treasure by the Government of Egypt.
- --Excavations at Oriyo mound in Gujarat, India, are illuminating the eclipse of the earliest stage of Indian urbanization with a return to pastoral nomadism in 1500 B.C. after 800 to 1,000 years of organized city dwelling.

Further, with emphasis on information exchange through small workshops, symposia and field conferences, the Smithsonian is encouraging international research in specialized areas, such as environmental research, wildlife and ecosystem studies, and museum techniques. In FY 1982, for example, U.S. scholars received support for participation in exchanges on the subjects of late Cenozoic climatic changes, Pakistan archeology, Tibetan studies, biological diversity, Hindu studies and high energy gamma rays.

The Importance of Multi-Year Grants

Beginning in FY 1979 the Smithsonian Foreign Currency Program began a policy of multi-year funding of major programs, whenever sufficient funds were available. Such funding is important because rational planning requires the advance commitment of professors and graduate students as well as of facilities. Multi-year grants, with annual disbursements subject to satisfactory review of progress by the advisory councils, allow participating institutions to coordinate such projects into their long-range scholarly programs, by providing some assurance of funding for the duration of the project.

Further, the Smithsonian has been able to use multi-year grants to protect successful projects from sudden termination when excess currency accounts were abruptly exhausted. This happened in Poland and Tunisia in 1976 and in Egypt in 1981. With multi-year funding over a three-year period, 10 projects in Egypt were funded to reasonable conclusions and 3 continuing projects gained sufficient time to seek other funding sources.

India is currently projected for removal from the excess currency list before 1990. The Smithsonian hopes to provide stabilizing funding before that time through multi-year grants and, for the American Institute of Indian Studies, a substantial forward-funded reserve.



Benefits to United States Institutions

Since the inception of the program in FY 1966, Smithsonian grants have been made to 225 United States institutions in 41 states and the District of Columbia to support more than 750 individual projects. Publications known to have resulted from program grants totalled more than 1,350 at the end of FY 1982.

Collections of original biological specimens and the archeological and ethnographic materials are acquired in the course of field research. They remain available for further study and interpretation by other generations of scholars long after the research teams supported by the Smithsonian have dispersed and their conclusions have been published. More than 100 such research collections have been placed in United States universities and museums. A similar number of collections has been added to the research resources of the excess currency countries.

The benefits of the program have extended to a far larger number of institutions than the 225 United States institutions which have received grants directly. For example, three of the grantee institutions are consortia of United States scholarly institutions. They are the American Institute of Indian Studies (AIIS) in Chicago, Illinois, with 37 institutional members; the American Research Center in Egypt (ARCE) in New York City, with 27 institutional and approximately 600 individual members; and the American Schools of Oriental Research (ASOR) in Cambridge, Massachusetts, with 135 member institutions.

Smithsonian grants have supported the reseach in India of 472 AIIS fellows over the 15-year period from FY 1968 through FY 1982. The fellows were drawn from 62 United States institutions in 23 states. Program grants have also supported more than 75 ARCE projects over the 17-year period from FY 1966 through FY 1982, and since FY 1977, 60 ARCE fellows have received Smithsonian support. Nine ASOR excavations in Israel and Tunisia provided research opportunities for more than 260 senior U.S. scholars and field training for more than 324 graduate students. The Indo-American Fellowship Program, initiated in FY 1977 under the auspices of the Indo-U.S. Subcommission on Education and Culture has sent 58 scholars from U.S. institutions to India.

Scientific Review Under the Smithsonian Program

The Smithsonian program considers proposals from any qualified American institution for research in fields of traditional Smithsonian competence. The program seeks the advice of experts in the specific area of sciences to be studied in reviewing the proposals and annually convenes advisory councils of senior scholars from across the nation. Following the recommendation in the House-Senate Conference Report 95-1672 dated September 29, 1978, the National Science Foundation reviews the credentials of the members of the advisory councils and certifies their competence. The councils discuss and evaluate the proposals, taking into consideration the experts' opinions, and provide specific advice to the Smithsonian regarding the selection of proposals recommended for support and the priorities among them.



Foreign currency awards to other institutions are executed as normal Federal contracts, with the American grantee institutions providing for full fiscal accountability. The Smithsonian audits each grantee's periodic financial reports and where grantees maintain records abroad, conducts site audits to ensure that appropriate accounting procedures are followed.

Whether funded originally on a multi-year or on a one-year basis, projects lasting more than one year are subject to an annual review of scientific progress by the advisory councils before another year of funding is approved. In addition, Smithsonian staff scientists and program advisory council members visit projects in the field when firsthand scientific reports are considered necessary. Smithsonian policy requires that grantees publish scientific results and that scientific collections be readily accessible to the scholarly community.

The Importance to the Smithsonian of Awards for Research

Access to funds for independent research is an essential factor in enabling the Smithsonian to attract and retain leading researchers and thereby to maintain a standard of excellence as a research institution. In this context, the Institution's initial request in FY 1966 for an appropriation of excess foreign currencies made it clear that Smithsonian scholars would compete for these funds. The appropriation justification in that year stated that the Institution would "...award and administer foreign currency grants...for maximum benefit of all participating institutions, as well as the Smithsonian." This appropriation has provided Smithsonian scientists an opportunity to pursue new and innovative research.

Under the Special Foreign Currency Program guidelines, Smithsonian proposals are reviewed by the same councils of distinguished scholars as are proposals from other institutions. Continuing projects also are subject to annual reviews. (These processes are described above in the section entitled "Scientific Review under the Smithsonian Program.") The Special Foreign Currency Program awards to Smithsonian employees, as to other scholars, often involve participants from other organizations and universities as collaborators. No Smithsonian employee, nor any other grantee, receives personal compensation to duplicate or supplement his salary. Program awards cover only field research costs in the excess currency country and travel to that country.

The awards to Smithsonian employees are executed as normal Federal allotments to the individual bureaus of the Institution for the support of approved employee research projects. Such funds are expended in accordance with Federal procurement and personnel regulations.

FORWARD-FUNDED RESERVE FOR THE AMERICAN INSTITUTE OF INDIAN STUDIES

Founded in 1961 by a consortium of 15 United States universities and colleges, the American Institute of Indian Studies' purpose is to promote American scholarship at the pre- and postdoctoral level on India in all



recognized fields of the humanities and the social and natural sciences. Funding for U.S. administration is raised through dues paid by member institutions and from foundation grants from several sources. As of 1982 the number of consortium members has grown to 37 with about 100 fellows in India at any given time, in a variety of programs. Funding for research and local administration in India is primarily through the Smithsonian, with lesser amounts being contributed by the Department of Education (language teaching programs only), National Science Foundation (fellowships in specific disciplines), International Communications Agency (fellowships), and the Ford Foundation.

The Smithsonian and the AIIS share common purposes: education and scholarship, global intellectual understanding and the promotion of research. Research at the Institute takes several forms: individual research in any recognized field; joint projects such as the ones resulting in the publication of the Encyclopedia of India's Philosophies; long-term projects, one of which has been the continuing project at the Center of Art and Archeology at Benares which will make available an archive of photographs, largely of Indian temples and monuments, for students and the scholarly public; and language teaching programs, now given in six of the 14 major Indian languages.

Through its competitive grants program, the Smithsonian has provided annual funding to the American Institute of Indian Studies for fellowships, research, symposia and publications and for administrative costs. The Smithsonian has helped sustain this Institute and other American research centers abroad for more than a decade because of their significant contributions to scholarship and science without regard for national boundaries and their special service to American scholars conducting research.

While the amount of Indian currency available to the U.S. government is still large, it is a finite fund in inactive accounts. With inflation rates in India at a high level, it will probably disappear more quickly than had been anticipated in the past. The U.S. Embassy is currently suggesting 5 to 7 years remaining of excess status. Since the end of "excess" currency status historically has happened suddenly, the Institution proposes to reserve funds for the AIIS to avoid a situation similar to the one which developed in Egypt. (In late 1978, funds for new American research in Egypt dried up suddenly, placing in doubt the future of American archeology and cultural history studies there and jeopardizing the continued existence of the very successful Cairo Center of the American Research Center in Egypt.)

By building a substantial foreign currency reserve fund, the Smithsonian hopes to assure that AIIS will be financially secure on a long-term basis, and to encourage other such centers to make the effort necessary to develop funding from other sources for the period beyond that of support by the Smithsonian. Toward this end, the Smithsonian has received and obligated the amount of \$500,000 in Indian rupees, appropriated in FY 1980 to initiate the fund, and a further amount of \$750,000, appropriated in FY 1981. In 1984, \$4,000,000 is requested for addition to the forward funded reserve. The reserve is to be maintained intact, until such time as the depletion of the United States Indian rupee account causes its removal from the "excess" currency list.



Long-term support for the AIIS is feasible and highly desirable. As a result of its long relationship with the AIIS, the Smithsonian has confidence that the mutually acceptable and beneficial working relationship can be continued. The AIIS is a very viable organization, standing in high regard with the Indian Government and the scholarly community.

Future requests are anticipated in succeeding fiscal years aimed at bringing the fund to a level capable of supporting basic AIIS activities for five years after the rupee is declared no longer to be "excess." In each fiscal year the funds will be obligated to AIIS but will not be made available for use until the end of the "excess" designation. Until that time the AIIS will continue to compete for Smithsonian grant funds as they do now and, given their past history of success, can be expected to receive continued support. A system of annual scholarly and financial review will be developed for the administration of the reserve fund.

INTERNATIONAL EFFORT TO SALVAGE MOENJODARO

In 1921, two important discoveries were made in the Indus Valley of India, now Pakistan, when archeologists discovered the remains of the cities of Harappa, near Lahore, and Moenjodaro, about 250 miles north of Karachi. These two cities apparently are the products of the Harappan civilization which flourished over 4,500 years ago, from about 3000 B.C. to 1500 B.C. Moenjodaro, a city of a square mile, is the larger and more impressive of the two sites. From the standpoint of planning, sanitation and social organization, this city anticipates developments which only blossomed several thousand years later.

The excavated ruins at Moenjodaro have been threatened since their discovery by two main causes of destruction: floods of the Indus River and highly saline ground waters have caused the serious deterioration of the excavated remains.

Since the 1960's, the Government of Pakistan has appealed to the international community for assistance in salvaging Moenjodaro by diverting the river, lowering the water table, providing remedial action to stabilize threatened buildings and preventing disintegration of those that have not yet been seriously damaged, and installing appropriate landscaping. UNESCO responded to Pakistan's appeal and, in 1974, agreed to lead an international fund raising campaign. In the interim, the Government of Pakistan, with the assistance of UNESCO, has conducted a series of technical studies relating to river control, dewatering and other methods conducive to the eventual preservation of the site.

On October 10, 1979, an agreement between UNESCO and the Government of Pakistan for the preservation and development of the monumental site of Moenjodaro was signed. Following this, an Executive Committee of the Campaign was set up to advise the Director-General of UNESCO on all aspects of the project. The Committee has held several meetings during which various aspects of the plans were reviewed. Tender documents are being prepared for water pumps



and structures and planting the area with salt-resistant plants to consolidate the soil and provide suitable protection from wind-driven sands. To date, UNESCO has raised approximately \$2.3 million, mainly from governmental contributions of member states and the Government of Pakistan has made an initial commitment of \$2 million for the project. The funds raised thus far have been deposited in an international trust fund for Moenjodaro. Considering that the total budget for the project is now estimated at more than \$13 million, the Committee is seeking new or additional contributions. The project, long in the planning stage, is now well launched with a ground water control scheme now in place. Accordingly, the Institution transferred to UNESCO in FY 1982, the appropriation of \$960,000 equivalent in nonconvertible Pakistani currency as an initial contribution from the United States toward this important project. The Smithsonian is seeking the second of four increments of funds for this project in FY 1984, aiming at a total U.S. contribution of \$4,000,000 equivalent.

The Smithsonian is conveying this gift because of its traditional interest in archeology and cultural history. It was the agent for conveying the final United States' contribution to the International Campaign to Save the Nubian Monuments—the successful effort to move the Temples of Philae. The Smithsonian Special Foreign Currency Program has supported the significant archeological investigations of Moenjodaro and other Harappan sites which have added greatly to knowledge of this civilization.

As with the Nubian monuments of Egypt, preserving the remains of Moenjodaro will be of great benefit to generations of future scholars. The network of scholarly relations between American institutions and their counterparts in Pakistan will be developed and strengthened. Indeed, the maintenance of cultural ties between nations can provide a link which endures through the shifting of other relations and insures continued contact between nations. Finally, support by the United States for the preservation of this unique historic site is in the spirit of the UNESCO convention concerning the protection of the world culture and natural heritage (the World Heritage Convention) which was ratified by the United States in 1973.



SMITHSONIAN INSTITUTION MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

SUMMARY OF OBLIGATIONS, ACTUAL AND ESTIMATED FY 1982, FY 1983, and FY 1984

Obligations of Funds by Program Area (dollar equivalents)

	FY 1982 Actual	FY 1983 Estimate	FY 1984 <u>Estimate</u>
Archeology and Related Disciplines	\$3,755,000 <u>2</u> /	\$1,765,000	\$7,865,000 <u>1/2</u> /
Systematic and Environmental Biology	445,000	272,000	505,000
Astrophysics and Earth Sciences	64,000	32,000	145,000
Museum Programs	237,000	41,000	260,000
Grant Administration 3/	66,000	25,000	65,000 <u>3</u> /
Science Information Program (Translations)	4/0-	40,000	300,000 4/
Total	\$4,567,000	\$2,175,000	\$9,140,000

Obligations of Funds by Country (dollar equivalents)

	FY 1982 <u>Actual</u>	FY 1983 Estimate	FY 1984 <u>Estimate</u>
Burma	\$ 17,000	\$ 5,000	\$ 26,000
Guinea	-0-	-0-	-0-
India	3,218,000 <u>3</u> /	1,978,000 <u>3/4</u> /	7,717,000 <u>1/3/4</u> /
Pakistan	1,332,000 2/	192,000	1,397,000 2/
Total	\$4,567,000	\$2,175,000	\$9,140,000

^{1/}Includes obligation for AIIS forward-funded reserve: FY 1984, \$4,000,000. 2/Includes obligation for U.S. contribution for Moenjodaro: FY 1982,

\$960,000, FY 1984, \$1,040,000

^{3/}Includes transfers to the State Department for "Foreign Affairs Administrative Support."

^{4/}Includes estimates for the Science Information Program for translations.



MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

FISCAL YEAR 1982 - ACTUAL OBLIGATIONS

Actual Obligations by Program Area (dollar equivalents)

	Research Projects 1/	Research Development 1/	Total
Archeology and Related Disciplines	\$3,738,000 <u>3</u> /	\$17,000	\$3,755,000
Systematic and Environ- mental Biology	417,000	28,000	445,000
Astrophysics and Earth Sciences	61,000	3,000	64,000
Museum Programs	237,000	0-	237,000
TOTAL FOR RESEARCH	\$4,453,000	\$48,000	\$4,501,000
SFCP Grant Administration	<u>2</u> /		66,000
Science Information Program-Translations			
TOTAL			\$4,567,000

Actual Obligations by Country (dollar equivalents)

	Grants Administration and Agency Transfers	Research Projects	Research Developmen	t Total
Burma	\$ -0-	\$ 17,000	\$ -0-	\$ 17,000
Guinea	-0-	-0-	-0-	0-
India	66,000 <u>2</u> /	3,109,000	43,000	3,218.000
Pakistan	0	1,327,000 3/	5,000	1,332,000
TOTAL	\$66,000	\$4,453,000	48,000	\$4,567,000

^{1/}These projects are described in the Grants List which follows.

^{2/}Includes transfers to the State Department for "Foreign Affairs Administrative Support."

^{3/}Includes \$960,000 obligation for U.S. contribution for Moenjodaro.



MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

FISCAL YEAR 1983 - ESTIMATED OBLIGATIONS

Estimated Obligations by Program Area (dollar equivalents)

	Research <u>Projects</u>	Research Development	<u>Total</u>
Archeology and Related Disciplines	\$1,744,000	\$21,000	\$1,765,000
Systematic and Environ- mental Biology	259,000	13,000	272,000
Astrophysics and Earth Sciences	29,000	3,000	32,000
Museum Programs	38,000	3,000	41,000
TOTAL FOR RESEARCH	\$2,070,000	\$40,000	\$2,110,000
SFCP Grant Administration	<u>1</u> /		25,000
Science Information Progr Translations <u>2</u> /	am		40,000
TOTAL			\$2,175,000

Estimated Obligations by Country (dollar equivalents)

	Grants Administration & Science Information Program	Research Projects	Research Development	t <u>Total</u>
Burma	\$ 1,000	\$ 4,000	\$ -0-	\$ 5,000
Guinea	-0-	-0-	-0-	-0-
India	62,000 <u>1/2</u> /	1,889,000	27,000	1,978,000
Pakistan	2,000	177,000	13,000	192,000
TOTAL	\$65,000	\$2,070,000	\$40,000	\$2,175,000

^{1/}Includes transfers to the State Department for "Foreign Affairs Administrative Support."

^{2/}Includes estimates for the Science Information Program for translations.



MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

FISCAL YEAR 1984 - ESTIMATED OBLIGATIONS

Estimated Obligations by Program Area (dollar equivalents)

	Research <u>Projects</u>	Research Development	<u>Total</u>
Archeology and Related Research	\$7,838,000 <u>3/4</u> /	\$27,000	\$7,865,000
Systematic and Environ- mental Biology	481,000	24,000	505,000
Astrophysics and Earth Sciences	141,000	4,000	145,000
Museum Programs	257,000	3,000	260,000
TOTAL FOR RESEARCH	\$8,717,000	\$58,000	\$8,775,000
SFCP Grants Administration	on <u>1</u> /		65,000
Science Information Program Translations 2/			
TOTAL			\$9,140,000

Estimated Obligations by Country (dollar equivalents)

	Grants Administration & Science Information Program	Research Projects	Research Development	<u>Total</u>
Burma	\$ 1,000	\$ 21,000	\$ 4,000	\$ 26,000
Guinea	-0-	-0-	-0-	-0-
India	352,000 <u>1</u> /	7,323,000 <u>3</u> /	42,000	7,717,000
Pakistan	12,000	1,373,000 4/	12,000	1,397,000
TOTAL	\$365,000	\$8,717,000	\$58,000	\$9,140,000

^{1/}Includes transfers to the State Department for "Foreign Affairs Administrative Support."

^{2/}Includes estimates for the Science Information Program for translations.
3/Includes \$4,000,000 estimated obligation for AIIS forward-funded reserve.
4/Includes \$1,040,000 estimated obligation for U.S. contribution to Moenjodaro.



MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

STATUS OF FUNDS (dollar equivalents)

	FY 1982 <u>Actual</u>	FY 1983 Estimated	FY 1984 Estimated
Unobligated Balance Start of Year	+ 141,000	+ 135,000	+ 60,000
Appropriation	+4,320,000	+2,000,000	+9,040,000
Recovery of Prior Years' Obligations	+ 241,000	+ 100,000	+ 100,000
Unobligated Balance, End of Year	- 135,000	- 60,000	- 60,000
TOTAL OBLIGATIONS	4,567,000	2,175,000	9,140,000



SMITHSONIAN INSTITUTION MUSUEM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM) Fiscal Year 1982

List of Grants

ARCHEOLOGY AND RELATED DISCIPLINES

The study of archeology, anthropology, and related fields such as ethnology, are studies of changes in the human condition brought about by the environment and by cultural factors. Societies such as ours that are undergoing rapid change are subject to increasing pressures to accommodate new factors. These societies must look to studies of the history of man as well as to studies of today's condition to find answers to such questions as:

- a) How have societies responded to similar pressures in the past?
- b) What are those elements in our condition that are biological imperatives or are so culturally interdependent that we dare not change them? For example, is the family unit essential to the survival of our civilization?
- c) What are the current options available to today's societies?

The urgency to understand the forces demanding change in human societies has caused scholars to study man and communities, past and present, for a better grasp of the process of social change.

Projects of United States institutions which contribute to understanding these processes and which received support in FY 1982, are listed below.

	Obligation Number	<u>Institution</u>	Principal <u>Investigator</u>	\$ Eqv.
BUF	RMA			
1.	TX205433	U. of Illinois Urbana, IL	F. Lehman	\$2,450

Intensive study of Old Court or Palace language and the Yaw dialect is expanding knowledge of the linguistic history of the Burmese and the relationships within its family languages.

2. TX101793 U. of Illinois J. Schober \$8,735 Urbana, IL

An examination of the dynamics between religious ideas and their practical manifestations in several areas in Burma is contributing to an understanding of the practices of Theravada Buddhism.



Obligation Number	Institution	Principal Investigator	\$ Eqv.
BURMA			
3. TX102124	U. of Illinois Urbana. TL	M. Woodward	\$3,660

Study of the temple complex at Mandalay Hill is focused on the history, iconography, political function and religious significance of the complex to contribute to further understanding of the Burmese royal cult.

INDIA

4.	20525700	&	American	Institute	E.	Dimock,	Jr.	\$1,338,500
	Amend. 1	&	of Indian	Studies				
	20852300		Chicago,	IL				

The American Institute of Indian Studies (AIIS) was founded in 1961 and today has a membership of 37 United States institutions. The AIIS is a unique national resource because it is the principal source of money supporting on an annual basis in the United States, the advancement of knowledge and understanding of India as well as the training in India of area specialists.

Moreover, the AIIS has served the U.S. national interest by sustaining active scholarly collaboration between the U.S. and India during periods of political stress when contacts have been interrupted. Disciplines sponsored by the AIIS are increasing from the original concentration on social sciences and the humanities to include the natural sciences as well. Smithsonian support of the AIIS has totalled more than \$7,945,000 equivalent in Indian rupees over a fifteen-year period.

a. American Institute E. Dimock, Jr. (\$234,000) of Indian Studies
Chicago, IL

The AIIS provides administrative support for its fellows and for a major language program from a headquarters in New Delhi and small offices in Bombay, Calcutta, Madras, and Poona.

b. American Institute E. Dimock, Jr. (\$1,104,000) of Indian Studies
Chicago, IL

The principal activity of the AIIS has been the appointment of fellows. The SFCP currently provides most of the funds for this fellowship program. AIIS fellows receiving support during FY 1982 are listed below.

SENIOR RESEARCH FELLOWS

U. of Arizona

Robert Gimello



SENIOR RESEARCH FELLOWS (Con't)

U. of Pennsylvania

U. of California, Berkeley Karine Schomer
Joanna Williams

University of Chicago Carol Bolen
Ronald Inden
A.K. Ramanujan

U. of Colorado Arlyn Ray Greathead

Robert Lester
Dennis McGilvray

Allen Thrasher

Columbia U. Judith Walsh

Evergreen State College Robert Gottlieb

Harvard U. John Carman Lee Siegel

Brian Silver

U. of Illinois Charles Capwell

James Madison U. Wade Wheelock

U. of Minnesota Henry Scholberg
Paul Staneslow

Ohio U. at Athens Gary Schwindler

Southern Illinois U. Uday Desai

U. of Texas Gail Minault

Unaffiliated Jan Zeitlin

Virginia Commonwealth U. Krishna Gairola

U. of Washington John Hawley

Wesleyan U. Kay Poursine

U. of Wisconsin Robert Miller A.K. Narain

Phillip Zarilli

Wilma Heston



JUNIOR RESEARCH FELLOWS

U.	of Californ	nia	Charles Pain
U.	of Californ	nia at Los Angeles	J. Andrew Greig
U.	of Chicago		Barry Friedman Edward Proctor Carol Sakala
U.	of Hawaii		Venkata Raghotham John Seyller
U.	of Illinois	s	Alison Arnold
U.	of Iowa		Rodney Parrott Walter Smith
U.	of Minnesot	ta	Billy David Burke
U.	of Pennsylv	v <mark>an</mark> ia	Raymond Crow
U.	of Virginia	a	Jules Levinson Katherine Rogers
U.	of Wiscons:	in	Judith Benade James Nye Beth Solomon

	Obligation Number	<u>Institution</u>	Principal Investigator	\$ Eqv.
5.	20530000	American Institute of Indian Studies Chicago, IL		\$42,455

The AIIS administers projects of translation, edition, and publication of scholarly texts. In FY 1982, recipients of funds for projects under this grant were:

U. of Pennsylvania	W. Halbfass
U. of Wisconsin	M.V. Rao S. Roden
Hebrew U.	D. Shulman
Unaffiliated	D. Curley



	Obligation Number	Institution	Principal Investigator	\$ Eqv.
6.	20494500	American Institute of Indian Studies Chicago, IL	N. Barrier	\$50,000

Establishment of a revolving AIIS publications fund.

7. 20384400 & American Institute N. Jairazbhoy \$156,325 Amend. 1 of Indian Studies Chicago, IL

The establishment of the Archives and Research Center for Ethnomusicology will provide a center for the documentation of traditional Indian folk music as studied by international scholars.

8. 20853500 American Institute P. Kuepferle \$41,963 of Indian Studies Chicago, IL

Editing of Avaita Vedanta volumes of the Encyclopedia of Indian Philosophies.

9. 20627800 & American Institute G. Possehl \$556,000 20852700 & of Indian Studies 10560600, Chicago, IL Amend. 3

The Center for Art and Archeology at Benares, India, is a vital research facility serving scholars of ancient and modern India from all over the world. The Center was established to apply rigorous scholarly standards to the massive job of photographing and indexing the art collections and temples and monuments of India which abound in every region of the subcontinent. The archive of more than 30,000 photographs continues to grow as important projects such as the photographing of collections in the Indian Musuem in Calcutta are undertaken.

10. 20409100 American Institute H. Spodek \$17,000 of Indian Studies Chicago, IL

The translating and editing of the autobiography of Indulal Yognik, an important regional figure at the time of Indian independence, will make his writings available for the first time to non-Gujarati speakers.



	Obligation Number	Institution	Principal Investigator	\$ Eqv.
11.	20689300 & 20852400	Asia Society, NY, Agent for the American Panel of the Indo-U.S. Subcommission on Edu- cation and Culture		\$279,058

The Indo-American Fellowship Program, established in late 1975, was created to widen the circle of scholarly/professional contacts and increase the extent of collaboration between the U.S. and India. Fellowships are granted for research in India, primarily at the postdoctoral or equivalent level with substantial collaboration with Indian colleagues. The fellows who received support in FY 1982 are:

U. of Arizona		Victoria Hutchi	son
U. of Colorad	0	Joyce Lebra	
Duke U.		John Cell	
Library of Co	ngress	James Ageabroad	
U. of Marylan	d	Karl DuPuy	
Mississippi S	tate U.	William Bonney	
New York U.		Carol Martin	
San Francisco	Opera Company	Jonathan C. Kra	mer
SUNY at Stony	Brook	Estelle James	
U. of Tulsa		William Holling	sworth
Unaffiliated		Yosika I. Wada	
12. 20203500	U. of California Berkeley, CA	J.D. Clark	\$60,000

Survey of prehistoric land-use in the upper Son Valley, Madhya Pradesh, will provide data for comparison with paleo-ecological events in Africa, showing to what extent cultural development in the subcontinent may have paralleled that in tropical Africa where current evidence predicts the development of humankind.



Obligation Number	Institution	Principal Investigator	\$ Eqv.
13. TX200617	U. of Chicago Chicago, IL	J. Carswell	\$1,700

Examination of far east/near east trading sites in South India will provide information for comparative studies in Sri Lanka.

14. 20852800 State U. of New York G. Forbes \$13,434 Oswego, NY

The lives of 20th century Indian women of middle class will be examined and analyzed with the using of family photographs.

15. TX200296 & U. of New Mexico J. Fritz \$7,783 200298 Albuquerque, NM

Study of Vijayanagara, the Hindu imperial capital, is providing valuable understanding of the organizational patterns and principles embodied in this greatest of medieval Hindu urban centers.

16. 20805900 & Case Western Reserve M. Goldstein \$28,870 U., Cleveland, OH

The final years of Tibetan history - 1933-1950 - will be documented with interviews of the aging refugees now residing in India.

17. 20487600 Herbert H. Lehman C. Kramer \$31,244 College, CUNY

A detailed study of contemporary ceramic production will have useful application in the analysis of ethnographic and prehistoric data.

18. 20190700 U. of Pennsylvania G. Possehl \$29,760 Philadelphia, PA

The unusual change back to pastoral nomadism from urbanized civilization is being examined in an archeological program in Gujarat.

19. TX200240,-241, Social Science A. Ramanujan \$16,595 -242,-243,-250, Research Council -251,-290, New York, NY 205175,-190

U.S. participation in the conference, "In Search of a Terminology: Terms and Concepts for the Analysis of South Asian Cultural Forms."



Obliga Number		cipal stigator \$ Eqv.
20. 0069090 Amend.	ennsylvania F. So phia, PA	outhworth \$7,395

The establishment of a nomenclature of the ancient economic plants of South India will provide a useful tool for analysis of ancient and modern South Indian languages.

21. 20223600 & American U. C. White \$95,000 Amend. 1 Washington, D.C.

The rich Vaishnava literary heritage of India is being recorded and conserved with a major effort to microfilm documents in private and public collections throughout India.

PAKISTAN

22. TX205018 Duke U. J. Richards \$4,585

Consultation with U.S. and Pakistani scholars and officials to assess possibilities for future collaborative research in the humanities and social sciences.

23. TX2095251	Colorado State U.	L. Flam	\$1,870
	Ft. Collins, CO		
205250	Case Western Reserve	J. Shaffer	\$1,800
	U., Cleveland, OH		

U.S. participation in the First International Conference on Pakistan Archeology.

24. 206579 UNESCO \$960,000 Paris, France

Contribution to UNESCO's international campaign to salvage the Indus city of Moenjodaro in Pakistan.



SYSTEMATIC AND ENVIRONMENTAL BIOLOGY

For much of our history as a nation, we have regarded technology as the key to the betterment of the human condition. It is a concept that once stood virtually unquestioned and which has profoundly influenced changing cultural patterns around the world. Today, however, it is becoming increasingly obvious that technology exacts its price, one that is multiplied by new levels of population. Biological scientists who once concerned themselves with laying the brick-work of the edifice of human knowledge now find themselves with a new responsibility. We now know that it is imperative to establish norms for our environmental systems, to monitor changes, and to predict the consequences of social policies that may have an injurious environmental impact. American scientists are again the leaders in international research efforts in these new fields. Through the long-term collaborative relationships between American and foreign institutions and scholars, research conducted under the Smithsonian Foreign Currency Program serves as a foundation for the intense efforts that will be required to solve the problems of biological science that transcend national boundaries.

Obligation Number		Institution	Principal Investigator	\$ Eqv.
BURMA				
25. TX205235	•	U. of California Berkeley, CA	D. Savage R. Ciochon	\$2,158

Stratigraphic and paleobiologic investigations of fossil anthropoid sites in Burma are uncovering new information on primate origins in Asia.

INDIA

26. TX205235	U. of California	R. Ciochon	\$2,735
	Berkelev. CA		

Examination of Cenozoic fossils in Indian collections is providing comparative information on primate origins in Asia.

27. TX200795	Queens College	P. Chabora	\$6,070
	Flushing, NY		

Examination of the relationship of wasps and their parasites is providing new information on natural selection and the diversity of tropical biological communities.

28. TX200664	Smithsonian Insti-	P. Davidar	\$994
	tution		
	Washington, D.C.		

Travel to the U.S. to take up a fellowship to study the coevolutionary patterns between mistletoes and the birds which feed on their fruits.



Obligation Number	Institution	Principal Investigator	\$ Eqv.
29. TX200836, -837	Smithsonian Institution Washington, D.C.	D. Davis	\$7, 195

Development of a program to conduct a complete biological survey of the Eastern Ghats of India will provide baseline data for future management of the area.

30. TX200396	Smithsonian	R. DeFilipps	\$2,070
	Institution		
	Washington, D.C.		

U.S. participation in workshops on conservation of endangered plant species.

31. TX200663 Southern Methodist D. Gillette \$12,092 U., Dallas, TX

Examination of the microvertebrates of Central India is adding to the knowledge of the evolution of Mesozoic faunas and the history of Gondwana geology.

32. 200640 Princeton U. J. Gould \$6,951 Princeton, N.J.

Behavioral studies of three species of Indian bees are providing new materials for comparison with the well-known honey bee.

33. TX200441 Washington State U. Y. Herman- \$14,760 Pullman, WA Rosenberg

Examination of deep sea sediments is providing information on climatic changes of the late Cenozoic period.

34. TX105417, U. of Georgia C. Jordan \$6,000 205000,-016 Athens, GA

Travel of U.S. participants in the Silver Jubilee Symposium of the international Society for Tropical Ecology at Bhopal, India.

35. RFTX102377 Smithsonian E. Montgomery \$560 Amend. 2 Institution Washington, D.C.

Survey of the current population status of pelicans in India.



Obligation Number	Institution	Principal Investigator	\$ Eqv.
36. TX 201016	Smithsonian Institution Washington, D.C.	M. Moynihan	\$2,975

Behavior studies of cephalopods in South India will provide important comparative material for studies of New World species.

37. TX200639 Pennsylvania State U. D. Pearson \$3,865 University Park, PA

Observational and manipulative tests on Indian tiger beetles is providing material for comparative studies on New World species.

38. 8FA 1B101 Smithsonian S. Ripley \$10,112
Institution
Washington, D.C.

An ornithological field survey in Arunachal Pradesh, India, examined an area previously unstudied and undeveloped to assess possibilities for preservation as a natural biosphere.

39. TX200395 Smithsonian R. Rudran \$3,163
Institution
Washington, D.C.

U.S. participation in the Indo-U.S. Workshop on Conservation and Management of Biological Diversity at Bangalore.

40. TX200898 Smithsonian M. West-Eberhard \$100 Institution Washington, D.C.

A study of the social wasps of India focussing on aspects of colony organization will provide comparative data for ongoing studies on New World genera.

PAKISTAN

41. 20852200 U. of Michigan P. Gingerich \$50,000 Ann Arbor, MI

A search for Paleocene and Eocene (55-65 million year old) fossil mammals in Pakistan will substantially contribute to our knowledge of the evolution of mammals and their geographic distribution.



	Obligation Number	Institution	Principal Investigator	\$ Eqv.
42.	20234000, 20868200	Howard U. Washington, D.C.	S.T. Hussain	\$128,663

Field studies of recently discovered vertebrate fauna from the Miocene lower Siwaliks of Pakistan, includes six families of rodents and two of insectivores some of which are new to South Asian fossil deposits.

43. 20203700,	Harvard U.	D. Pilbeam	\$185,000
20853400	Cambridge, MA		

In a search for fossils of small and large animals in Pakistan, particularly for primates dating from the time of man's earliest development, a collaborative effort between Yale University and the Geological Survey of Pakistan is striving toward a better understanding of the evolution of man.



ASTROPHYSICS AND EARTH SCIENCES

The study of astrophysics and earth sciences is the study of man's available energy and mineral resources. Studies of the stars and their origins reveal much about the origin, composition, behavior and fate of the Earth. The forces governing the stars are the same as those governing the star which is our Sun. The Earth was born of solar minerals, and the Sun remains the source of all energy, fossil or otherwise, available to man today. Uranium, for example, which provides the fuel for atomic power plants, is present in the Sun as well as in the Earth. Coal and oil are fossil remains of plants and animals which once relied on sunshine for life, just as all life does today.

Studies, like those listed below, which received Smithsonian Foreign Currency Program support in FY 1982 are contributing to knowledge essential to meet man's future energy and mineral needs, to understand and predict such natural phenomena as earthquakes, and to foster space age developments. Such projects help host nations, particularly the developing nations, improve their scientific output while providing United States institutions with collaborators, facilities or field research oppportunities essential to the conduct of such studies, judged most likely to advance man's knowledge to his available energy and mineral resources.

Obligation Number	Institution	Principal Investigator	\$ Eqv.
INDIA			
44. TX200568	Smithsonian Institution Washington, D.C.	F. El-Baz	\$3,281
Development of an ari	d zone workshop.		
45. TX201036	Smithsonian Institution Washington, D.C.	G. Fazio	\$10,000

Participation of Indian astronomer in balloon borne far-infrared telescope program.

46. TX200368	Smithsonian	K. Fredriksson	\$2,753
	Institution		
	Washington, D.C.		

Continuation of meteorite studies of the Lunar impact crater.



	Obligation Number	Institution	Principal Investigator	\$ Eqv.
47.	TX200621	U. of Maryland College Park, MD	M. Kundu	\$7,165

Coordinated space and ground-based observations have been designed for an integrated effort for understanding the physics of solar flares and other explosive events in the universe.

48. TX200644 Alcorn State U. M. Paul \$2,645 Lorman, MS

The study of scintillation effects on satellite and transionospheric radio signals at low latitude regions will reveal new information on the anomaly effects in these transition zones.

49. TX200638 U. of Chicago D. Schramm \$3,510 Chicago, IL

Collaborative theoretical research in the field of astrophysics has produced a model of an early universe and associated cosmology.

50. TX201051, Smithsonian T. Weeks \$35,596 200968,-85, Institution -86,-87,-88 Washington, D.C.

Travel of participants in the Conference on High Energy Gamma Rays.



MUSEUM PROGRAMS

The scope of museum activities is growing and changing. The traditional museum role has been the care and preservation of scientific specimens and cultural objects for study and reevaluation as new techniques and data become available. Today museums also have a growing role belonging traditionally to universities. They also play a growing role in communication between present-day cultures, drawing together peoples of different lands when language barriers prevent exchange of basic information. Museums are now making more use of their skilled personnel and their collections for popular education. Increasingly, museums are broadening the interpretation of museum collections to include living cultural traditions such as crafts and the performing arts.

Projects like those listed below, which received Smithsonian Foreign Currency Program support in FY 1982, support both the traditional and the newer roles of museums. These projects respond to those needs of the museum profession not met within the natural sciences and cultural history areas of the Smithsonian Foreign Currency Program.

Obligation Number	Institution	Principal Investigator	\$ Eqv.
INDIA			
51. 20494600, 20854300 & TX200262 thru 200273, 200288	The Asia Society (As Agent for Indo- U.S. Subcommission on Education & Culture) New York, NY	T. Tanen	\$232,013

Continuation of museum-related programs and exchanges under the Indo-U.S. Subcommission on Education and Culture.

52. TX205072	Smithsonian	T. Stoban	\$3,000
	Institution		
	Washington, D.C.		

Travel of Bhutanese museum director to study U.S. museum professional methodology.

53. TX200951	Columbia U.	B. Aziz	\$1,446
	New York, NY		

Travel of participant in Third International Tibetan Studies Seminar.



SFCP GRANTS ADMINISTRATION

Obligation Number	Institution	Principal Investigator	\$ Eqv.
INDIA			
54•	Smithsonian Institution Washington, D.C.		\$25,903

Indian rupees were transferred to the State Department for Foreign Affairs Administrative Support, the costs incurred by the State Department in providing administrative support to Foreign Currency Program grantees in the excess currency countries.

55. TX10089	Smithsonian	\$468
Amend. 1	Institution	
	Washington, D.C.	

This obligation supported inspection and audit of research projects and liaison with host country governments by Smithsonian staff and advisors.

56. 8FA1B101	Smithsonian	\$40,000
	Institution	
	Washington, D.C.	

This obligation is for the development, conduct, and administration of Smithsonian/SFCP projects in India.





