

CONFORMED COPY

CREDIT NUMBER 2426 GH

Development Credit Agreement

(Environmental Resource Management Project)

between

REPUBLIC OF GHANA

and

INTERNATIONAL DEVELOPMENT ASSOCIATION

Dated December 21, 1992

CREDIT NUMBER 2426 GH

DEVELOPMENT CREDIT AGREEMENT

AGREEMENT, dated December 21, 1992, between REPUBLIC OF GHANA (the Borrower) and INTERNATIONAL DEVELOPMENT ASSOCIATION (the Association).

WHEREAS: (A) the Borrower, having satisfied itself as to the feasibility and priority of the Project described in Schedule 2 to this Agreement, has requested the Association to assist in the financing of the Project;

(B) the Borrower intends to contract from the Danish International Development Agency (DANIDA) a grant (the DANIDA Grant) in an amount equivalent to not less than \$4,300,000 to assist in financing the Project on the terms and conditions set forth in an agreement (the DANIDA Grant Agreement) to be entered into between the Borrower and DANIDA;

(C) the Borrower intends to contract from the Overseas Development Agency (ODA) a grant (the ODA Grant) in an amount equivalent to not less than \$900,000 to assist in financing the Project on the terms and conditions set forth in an agreement (the ODA Grant Agreement) to be entered into between the Borrower and ODA; and

(D) the Borrower intends to contract from the International Bank for Reconstruction and Development (the Bank), acting as trustee of the Global Environment Trust Fund (GET) a grant (the GET Grant) in an amount of SDR 5,000,000 to assist in financing the Project on the terms and conditions set forth in an agreement (the GET Grant Agreement) to be entered into between the Borrower and the Bank, acting as Trustee of the GET; and

WHEREAS the Association has agreed, on the basis, inter alia, of the foregoing, to extend the Credit to the Borrower upon the terms and conditions set forth in this Agreement;

NOW THEREFORE the parties hereto hereby agree as follows:

#### ARTICLE I

##### General Conditions; Definitions

Section 1.01. The "General Conditions Applicable to Development Credit Agreements" of the Association, dated January 1, 1985, with the last sentence of Section 3.02 deleted (the General Conditions) constitute an integral part of this Agreement.

Section 1.02. Unless the context otherwise requires, the several terms defined in the General Conditions and in the Preamble to this Agreement have the respective meanings therein set forth and the following additional terms have the following meanings:

- (a) "Cedis" means the currency of the Borrower;
- (b) "CSIR" means the Council for Scientific and Industrial Research within the Borrower's Ministry of Industry, Science and Technology;
- (c) "CWM Project Operations Committee" means the Coastal Wetlands Management Project Operations Committee, established by the Borrower for purposes of the Project;
- (d) "EAP" means the Environmental Action Plan, approved June 13, 1991, by the PNDC Committee of Secretaries;
- (e) "EPC/TS" means the Technical Secretariat of the Environmental Protection Council within the Borrower's Ministry of Local Government;
- (f) "EQ Project Operations Committee" means the Environmental Quality Project Operations Committee, established by the Borrower for purposes of the Project;
- (g) "Ghana Survey School" means the Ghana Survey School within the Survey Department;
- (h) "Land and Water Management Central Unit" means the Land and Water Management Central Unit described in Part C.3 of the Project and established in accordance with Section 6.01 (f) of this Agreement;
- (i) "Lands Commission" means the Lands Commission established by the Borrower pursuant to Section 36 of P.N.D.C.L. 42, 1982;
- (j) "LI Project Operations Committee" means the Land Information Project Operations Committee, established by the Borrower for purposes of the Project;
- (k) "LWM Project Operations Committee" means the Land and Water Management Project Operations Committee, established by the Borrower for purposes of the Project;
- (l) "Meteorological Services Department" means the Meteorological Services Department within the Borrower's Ministry of Transport and Communications;

(m) "MLNR" means the Borrower's Ministry of Land and Natural Resources;

(n) "MOA" means the Borrower's Ministry of Agriculture;

(o) "PNDC" means the Borrower's Provisional National Defence Council;

(p) "Project Coordination Committee" means the project coordination committee established by the Borrower to coordinate the activities under the Project;

(q) "Project Operations Committee(s)" means the CWM Project Operations Committee, EQ Project Operations Committee, LI Project Operations Committee, LWM Project Operations Committee, and SI Project Operations Committee, collectively or individually, as the case may be;

(r) "Project Preparation Advance" means the project preparation advance granted by the Association to the Borrower pursuant to an exchange of letters dated July 26, 1990 and October 29, 1990 between the Borrower and the Association;

(s) "Ramsar Convention" means the Convention on Wetlands of International Importance, especially as Waterfowl Habitat, Ramsar, Iran, February 2, 1971, as amended by the Paris Protocol of March 12, 1982;

(t) "Ramsar Sites" means the sites demarcated by the Borrower under the Ramsar Convention in carrying out Part D.1 of the Project;

(u) "Regina Conference Recommendation" means Recommendation 3.3 set forth in the report issued at the Third Meeting of the Conference of the Contracting Parties under the Ramsar Convention held in Regina, Saskatchewan, Canada, May 27 to June 5, 1987;

(v) "RSAU" means the Remote Sensing Applications Unit of the Department of Geography and Resource Development, University of Ghana;

(w) "SI Project Operations Committee" means the Studies and Investigations Project Operations Committee, established by the Borrower for purposes of the Project;

(x) "Soils Research Institute" means the Soils Research Institute within CSIR;

(y) "Special Account" means the account referred to in Section 2.02 (b) of this Agreement; and

(z) "Survey Department" means the Survey Department within MLNR.

## ARTICLE II

### The Credit

Section 2.01. The Association agrees to lend to the Borrower, on the terms and conditions set forth or referred to in the Development Credit Agreement, an amount in various currencies equivalent to twelve million six hundred thousand Special Drawing Rights (SDR 12,600,000).

Section 2.02. (a) The amount of the Credit may be withdrawn from the Credit Account in accordance with the provisions of Schedule 1 to this Agreement for expenditures made (or, if the Association shall so agree, to be made) in respect of the reasonable cost of goods and services required for the Project described in Schedule 2 to this Agreement and to be financed out of the proceeds of the Credit.

(b) The Borrower shall, for the purposes of the Project, open and maintain in dollars a special deposit account in a commercial bank on terms and conditions satisfactory to the Association, including appropriate protection against set-off, seizure or attachment. Deposits into, and payments out of, the Special Account shall be made in accordance with the provisions of Schedule 5 to this Agreement.

(c) Promptly after the Effective Date, the Association shall, on behalf of the Borrower, withdraw from the Credit Account and pay to itself the amount required to repay the principal amount of the Project Preparation Advance withdrawn and outstanding as of such date and to pay all unpaid charges thereon. The unwithdrawn balance of the authorized amount of the Project Preparation Advance shall thereupon be cancelled.

Section 2.03. The Closing Date shall be December 31, 1997 or such later date as the Association shall establish. The Association shall promptly notify the Borrower of such later date.

Section 2.04. (a) The Borrower shall pay to the Association a commitment charge on the principal amount of the Credit not withdrawn from time to time at a rate to be set by the Association as of June 30 of each year, but not to exceed the rate of one-half of one percent (1/2 of 1%) per annum.

(b) The commitment charge shall accrue: (i) from the date sixty days after the date of this Agreement (the accrual date) to the respective dates on which amounts shall be withdrawn by the Borrower from the Credit Account or cancelled; and (ii) at the rate set as of the June 30 immediately preceding the accrual date or at such other rates as may be set from time to time thereafter pursuant to paragraph (a) above. The rate set as of June 30 in each year shall be applied from the next payment date in that year specified in Section 2.06 of this Agreement.

(c) The commitment charge shall be paid: (i) at such places as the Association shall reasonably request; (ii) without restrictions of any kind imposed by, or in the territory of, the Borrower; and (iii) in the currency specified in this Agreement for the purposes of Section 4.02 of the General Conditions or in such other eligible currency or currencies as may from time to time be designated or selected pursuant to the provisions of that Section.

Section 2.05. The Borrower shall pay to the Association a service charge at the rate of three-fourths of one percent (3/4 of 1%) per annum on the principal amount of the Credit withdrawn and outstanding from time to time.

Section 2.06. Commitment charges and service charges shall be payable semiannually on March 15 and September 15 in each year.

Section 2.07. (a) Subject to paragraphs (b) and (c) below, the Borrower shall repay the principal amount of the Credit in semi-annual installments payable on each March 15 and September 15, commencing March 15, 2003 and ending September 15, 2032. Each installment to and including the installment payable on September 15, 2012 shall be one percent (1%) of such principal amount, and each installment thereafter shall be two percent (2%) of such principal amount.

(b) Whenever (i) the Borrower's gross national product per capita, as determined by the Association, shall have exceeded \$790 in constant 1985 dollars for five consecutive years, and (ii) the Bank shall consider the Borrower creditworthy for Bank lending, the Association may, subsequent to the review and approval thereof by the Executive Directors of the Association and after due consideration by them of the development of the Borrower's economy, modify the terms of repayment of installments under paragraph (a) above by requiring the Borrower to repay twice the amount of each such installment not yet due until the principal amount of the

Credit shall have been repaid. If so requested by the Borrower, the Association may revise such modification to include, in lieu of some or all of the increase in the amounts of such installments, the payment of interest at an annual rate agreed with the Association on the principal amount of the Credit withdrawn and outstanding from time to time, provided that, in the judgment of the Association, such revision shall not change the grant element obtained under the above-mentioned repayment modification.

(c) If, at any time after a modification of terms pursuant to paragraph (b) above, the Association determines that the Borrower's economic condition has deteriorated significantly, the Association may, if so requested by the Borrower, further modify the terms of repayment to conform to the schedule of installments as provided in paragraph (a) above.

Section 2.08. The currency of the United States of America is hereby specified for the purposes of Section 4.02 of the General Conditions.

### ARTICLE III

#### Execution of the Project

Section 3.01. (a) The Borrower declares its commitment to the objectives of the Project as set forth in Schedule 2 to this Agreement and, to this end, shall carry out the Project through EPC/TS, together with: (i) MOA, for Part C of the Project, and (ii) MLNR, for Part D of the Project, with due diligence and efficiency and in conformity with appropriate administrative and financial practices, and with due regard to ecological and environmental factors, and shall provide, promptly as needed, the funds, facilities, services and other resources required for the Project.

(b) Without limitation upon the provisions of paragraph (a) of this Section, and, except as the Borrower and the Association shall otherwise agree, the Borrower shall carry out the Project in accordance with the Implementation Program set forth in Schedule 4 to this Agreement.

Section 3.02. Without limitation upon any of its obligations under Section 3.01 of this Agreement, the Borrower shall:

(a) open and maintain in a commercial bank an environmental project account, to be managed by EPC/TS under terms and conditions satisfactory to the Association, to be used exclusively for the purposes of meeting expenditures under the Project which are not financed out of the proceeds of the Credit, the DANIDA Grant, the ODA Grant or the GET Grant; and

(b) in addition to the initial deposit referred to in Section 6.01 (b) of this Agreement, deposit into said account promptly before each fiscal quarter starting after the Effective Date, the Borrower's contribution to the financing of the Project required for such ensuing quarter under the Project's work program (prepared pursuant to paragraph 2 (a) of Schedule 4 to this Agreement).

Section 3.03. Except as the Association shall otherwise agree, procurement of the goods, works and consultants' services required for the Project and to be financed out of the proceeds of the Credit shall be governed by the provisions of Schedule 3 to this Agreement.

Section 3.04. (a) The Borrower shall, through EPC/TS, MOA and MLNR, carry out, jointly with the Association, not earlier than 28 months and not later than 32 months after the Effective Date, a mid-term review of the progress made in carrying out the Project. This review shall cover, among other things: (i) the development and implementation of the management information system, (ii) the effectiveness of the training programs, (iii) progress in carrying out the public awareness program under Part A.3 of the Project, (iv)

the status of the production of the maps, data bases and studies described in Part B of the Project, and (v) the status of any policy and legislative reform being carried out by the Borrower in the context of the EAP.

(b) EPC/TS shall, at least four weeks prior to the mid-term review described in paragraph (a) above, distribute to the Association, MOA and MLNR a report describing the status of the items listed in such paragraph and of Project implementation generally.

(c) Based on such review, the Borrower shall promptly prepare an action program, acceptable to the Association, for the further implementation of the Project, and shall implement such action program.

#### ARTICLE IV

##### Financial Covenants

Section 4.01. (a) The Borrower shall maintain or cause to be maintained records and accounts adequate to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of the Project of the departments or agencies of the Borrower responsible for carrying out the Project or any part thereof.

(b) The Borrower shall:

- (i) have the records and accounts referred to in paragraph (a) of this Section including those for the Special Account for each fiscal year audited, in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Association;
- (ii) furnish to the Association, as soon as available, but in any case not later than six months after the end of each such year, a certified copy of the report of such audit by said auditors, of such scope and in such detail as the Association shall have reasonably requested; and
- (iii) furnish to the Association such other information concerning said records, accounts and the audit thereof as the Association shall from time to time reasonably request.

(c) For all expenditures with respect to which withdrawals from the Credit Account were made on the basis of statements of expenditure, the Borrower shall:

- (i) maintain or cause to be maintained, in accordance with paragraph (a) of this Section, records and accounts reflecting such expenditures;
- (ii) retain, until at least one year after the Association has received the audit report for the fiscal year in which the last withdrawal from the Credit Account or payment out of the Special Account was made, all records (contracts, orders, invoices, bills, receipts and other documents) evidencing such expenditures;
- (iii) enable the Association's representatives to examine such records; and
- (iv) ensure that such records and accounts are included in the annual audit referred to in

paragraph (b) of this Section and that the report of such audit contains a separate opinion by said auditors as to whether the statements of expenditure submitted during such fiscal year, together with the procedures and internal controls involved in their preparation, can be relied upon to support the related withdrawals.

#### ARTICLE V

##### Remedies of the Association

Section 5.01. Pursuant to Section 6.02 (h) of the General Conditions, the following additional events are specified:

(a) a situation has arisen which shall make it improbable that the EAP, or a significant part thereof, will be carried out; and

(b) (i) subject to subparagraph (ii) of this paragraph:

(A) the right of the Borrower to withdraw the proceeds of any loan or grant made to the Borrower for the financing of the Project shall have been suspended, cancelled or terminated in whole or in part, pursuant to the terms of the agreement providing therefor, or

(B) any such loan shall have become due and payable prior to the agreed maturity thereof; and

(ii) subparagraph (i) of this paragraph shall not apply if the Borrower establishes to the satisfaction of the Association that: (A) such suspension, cancellation, termination or prematuring is not caused by the failure of the Borrower to perform any of its obligations under such agreement; and (B) adequate funds for the Project are available to the Borrower from other sources on terms and conditions consistent with the obligations of the Borrower under this Agreement.

Section 5.02. Pursuant to Section 7.01 (d) of the General Conditions, the following additional event is specified, namely that any event specified in paragraph (a) (ii) of Section 5.01 of this Agreement shall occur, subject to the proviso of paragraph (b) of that Section.

#### ARTICLE VI

##### Effective Date; Termination

Section 6.01. The following events are specified as additional conditions to the effectiveness of the Development Credit Agreement within the meaning of Section 12.01 (b) of the General Conditions:

(a) all conditions precedent to the effectiveness of the DANIDA Grant Agreement, the ODA Grant Agreement and the GET Grant Agreement have been fulfilled, other than those related to the effectiveness of this Agreement;

(b) the Borrower shall have established the environmental project account referred to in Section 3.02 and shall have deposited therein an initial amount in Cedis equivalent to \$100,000;

(c) the three Deputy Directors of EPC/TS and the financial controller for the Project shall have been appointed under terms of reference, and with qualifications and experience, acceptable to the Association and shall be in place;

(d) the Borrower shall have selected a supplier to provide the equipment and services required to carry out Part B.2 of the Project under procedures acceptable to the Association;

(e) the RSAU shall have adopted terms of reference and operational procedures acceptable to the Association, and the head of the RSAU shall have been appointed with qualifications and experience acceptable to the Association and shall be in place; and

(f) the Land and Water Management Central Unit shall have been established under terms of reference, and shall be staffed in a manner, acceptable to the Association.

Section 6.02. The date ninety (90) days after the date of this Agreement is hereby specified for the purposes of Section 12.04 of the General Conditions.

#### ARTICLE VII

##### Representatives of the Borrower; Addresses

Section 7.01. The PNDC Secretary for Finance and Economic Planning of the Borrower is designated as representative of the Borrower for the purposes of Section 11.03 of the General Conditions.

Section 7.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:

For the Borrower:

PNDC Secretary for Finance and  
Economic Planning  
Ministry of Finance and Economic  
Planning  
P.O. Box M40  
Accra, Ghana

Cable address:

ECONOMICON  
Accra

Telex:

2205 MIFAEP GH

For the Association:

International Development Association  
1818 H Street, N.W.  
Washington, D.C. 20433  
United States of America

Cable address:

INDEVAS  
Washington, D.C.

Telex:

248423 (RCA)  
82987 (FTCC)  
64145 (WUI) or  
197688 (TRT)

IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Agreement to be signed in their respective names in the District of Columbia, United States of America, as of the day and year first above written.

REPUBLIC OF GHANA

By /s/ Joseph Abbey  
Authorized Representative



INTERNATIONAL DEVELOPMENT ASSOCIATION

By /s/ Edward V.K. Jaycox  
Regional Vice President  
Africa

SCHEDULE 1

Withdrawal of the Proceeds of the Credit

1. The table below sets forth the Categories of items to be financed out of the proceeds of the Credit, the allocation of the amounts of the Credit to each Category and the percentage of expenditures for items so to be financed in each Category:

Category	Amount of the Credit Allocated (Expressed in SDR Equivalent)	% of Expenditures to be Financed
(1) Civil Works	1,190,000	100% of foreign expenditures and 70% of local expenditures
(2) Equipment, Vehicles and Materials for the Project (other than Parts B.2 and D)	2,700,000	100% of foreign expenditures and 90% of local expenditures
(3) Consultants' Services and Equipment for Part B.2 of the Project	2,640,000	100% of foreign expenditures and 90% of local expenditures
(4) Consultants' Services and Training for the Project (other than Parts B.2 and D)	2,430,000	100%
(5) Incremental Recurrent Costs for the Project (other than Part D)	2,300,000	70% for expenditures incurred up to December 31, 1995; and 50% thereafter

Category	Amount of the Credit Allocated (Expressed in SDR Equivalent)	% of Expenditures to be Financed
(6) Refunding of Project Preparation Advance	140,000	Amount due pursuant to Section 2.02 (c) of this Agreement
(7) Unallocated	1,200,000	
TOTAL	12,600,000 =====	

2. For the purposes of this Schedule:

(a) the term "foreign expenditures" means expenditures in the currency of any country other than that of the Borrower for goods or services supplied from the territory of any country other

than that of the Borrower;

(b) the term "local expenditures" means expenditures in the currency of the Borrower or for goods or services supplied from the territory of the Borrower; and

(c) the term "incremental recurrent costs" means the incremental Project-related costs for office supplies, vehicle operation and maintenance, and field work incurred by EPC/TS and MLNR.

3. Notwithstanding the provisions of paragraph 1 above, no withdrawals shall be made in respect of:

(a) payments made for expenditures prior to the date of this Agreement; and

(b) Category (3) until the Borrower shall have contracted for the provision of the equipment and services required to carry out Part B.2 of the Project under terms and conditions acceptable to the Association.

## SCHEDULE 2

### Description of the Project

The objectives of the Project are to improve the capacity of the Borrower and its population to manage environmental resources.

The Project consists of the following parts, subject to such modifications thereof as the Borrower and the Association may agree upon from time to time to achieve such objectives:

#### Part A: National Environmental Resource Management System

1. Strengthening the institutional capacity of EPC/TS to conduct environmental resource planning and management, including (a) construction of headquarters and regional facilities (including offices and staff housing) and acquisition of office equipment, (b) development and implementation of a management information system, and (c) commissioning of studies regarding resource management.

2. Training of, and provision of fellowships for, staff of EPC/TS and other central and local governmental agencies in environmental resource management areas, including environmental economics and law, data management, communications, and library and information sciences.

3. Development and implementation of a public awareness program regarding environmental resource management.

#### Part B: Environmental Information System

1. Development and implementation of an air and water quality monitoring system. Preparation by EPC/TS of an environmental quality data base.

2. Strengthening the operational capacity of the Survey Department to produce maps, conduct digital mapping and, through the Ghana Survey School, to provide training, including rehabilitation of facilities, acquisition of equipment, and training of staff. Preparation by the Survey Department of analog and digital maps of the Borrower's territory.

3. Strengthening the operational capacity of RSAU, including training of staff. Preparation by RSAU of land use maps.

4. Strengthening the operational capacity of the Meteorological Services Department, including training of staff. Development by the Meteorological Services Department of a computerized meteorological data base.

5. Strengthening the operational capacity of the Lands Commission, including training of staff. Preparation by the Lands Commission of a land ownership study and map of the Borrower's territory.

6. Strengthening the operational capacity of the Soils Research Institute, including training of staff. Development by the Soils Research Institute of a land suitability data base for the Borrower's territory, including preparation of soil maps, slope information and land utilization criteria.

Part C: Land and Water Management

1. Implementation of a pilot community-based land resource management program, including promotion of the use of soil fertility technologies, water and soil conservation technologies and biomass enhancing technologies.

2. Training of the staff of MOA's Department of Crop Services and Department of Agricultural Engineering Services, and of non-governmental organizations and other entities to support implementation of the community-based land resource management program under Part C.1 of the Project, and to improve resource management.

3. Operation within MOA of a Land and Water Management Central Unit responsible for promoting sound land and water resource management.

4. Establishment and operation of a land management fund designed to encourage sound land management practices by farmers.

Part D: Coastal Wetland Management

1. Demarcation under the Ramsar Convention and management of coastal wetland sites at Muni Lagoon, Densu River Delta, Sakumo Lagoon, Songor Lagoon, and Anlo/Keta Lagoon to promote the conservation of wetlands and waterfowl in accordance with the principles of such convention (including the preparation of baseline, monitoring and other resource management related studies).

2. Establishment and operation within MLNR's Department of Game and Wildlife of a Wetlands Management Unit responsible for the management of the Ramsar Sites and other coastal wetland sites.

3. Construction and maintenance of an effluent disposal pipe and a marine outfall for the Sakumo Lagoon.

4. Establishment and operation of an investment support fund to encourage investments in the Ramsar Sites.

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The Project is expected to be completed by June 30, 1997.

SCHEDULE 3

Procurement and Consultants' Services

Section I. Procurement of Goods and Works

Part A: International Competitive Bidding

1. Except as provided in Part D hereof, goods and works shall be procured under contracts awarded in accordance with procedures consistent with those set forth in Sections I and II of the "Guidelines for Procurement under IBRD Loans and IDA Credits" published by the Bank in May 1992 (the Guidelines).

2. To the extent practicable, contracts for goods shall be grouped in bid packages estimated to cost the equivalent of \$200,000 or more each.

3. Goods shall be exempted from preshipment price inspection by a third party inspection firm.

Part B: Preference for Domestic Manufacturers

In the procurement of goods in accordance with the procedures described in Part A.1 hereof, goods manufactured in the Republic of Ghana may be granted a margin of preference in accordance with, and subject to, the provisions of paragraphs 2.55 and 2.56 of the Guidelines and paragraphs 1 through 4 of Appendix 2 thereto.

Part C: Preference for Domestic Contractors

In the procurement of works in accordance with the procedures described in Part A.1 hereof, the Borrower may grant a margin of preference to domestic contractors in accordance with, and subject to, the provisions of paragraphs 2.55 and 2.56 of the Guidelines and paragraph 5 of Appendix 2 thereto.

Part D: Other Procurement Procedures

1. Items or groups of items for (a) works estimated to cost the equivalent of \$250,000 or less per contract, up to an aggregate amount equivalent to \$1,600,000, and (b) goods estimated to cost the equivalent of less than \$100,000 per contract, up to an aggregate amount equivalent to \$200,000, may be procured under contracts awarded on the basis of competitive bidding, advertised locally, in accordance with procedures satisfactory to the Association.

2. Items or groups of items for goods estimated to cost the equivalent of \$40,000 or less per contract, up to an aggregate amount equivalent to \$500,000, may be procured under contracts awarded on the basis of comparison of price quotations obtained from at least three suppliers eligible under the Guidelines, in accordance with procedures acceptable to the Association.

Part E: Review by the Association of Procurement Decisions

1. Review of invitations to bid and of proposed awards and final contracts:

(a) With respect to each contract estimated to cost the equivalent of \$100,000 or more, the procedures set forth in paragraphs 2 and 4 of Appendix 1 to the Guidelines shall apply. Where payments for such contract are to be made out of the Special Account, such procedures shall be modified to ensure that the two conformed copies of the contract required to be furnished to the Association pursuant to said paragraph 2 (d) shall be furnished to the Association prior to the making of the first payment out of the Special Account in respect of such contract.

(b) With respect to each contract not governed by the preceding paragraph, the procedures set forth in paragraphs 3 and 4 of Appendix 1 to the Guidelines shall apply. Where payments for such contract are to be made out of the Special Account, such procedures shall be modified to ensure that the two conformed copies of the contract together with the other information required to be furnished to the Association pursuant to said paragraph 3 shall be furnished to the Association as part of the evidence to be furnished pursuant to paragraph 4 of Schedule 5 to this Agreement.

(c) The provisions of the preceding subparagraph (b) shall not apply to contracts on account of which withdrawals from the Credit Account are to be made on the basis of statements of expenditure.

2. The figure of 15% is hereby specified for purposes of paragraph 4 of Appendix 1 to the Guidelines.

Section II. Employment of Consultants

In order to assist the Borrower in carrying out the Project, the Borrower shall employ consultants whose qualifications, experience and terms and conditions of employment shall be satisfactory to the Association. Such consultants shall be selected in accordance with principles and procedures satisfactory to the Association on the basis of the "Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency" published by the Bank in August 1981.

#### SCHEDULE 4

##### Implementation Program

##### General Project Implementation

1. The Borrower:

(a) shall operate (i) the EPC/TS, (ii) the Project Coordinating Committee, (iii) each of the five Project Operations Committees, (iv) the Land and Water Management Central Unit, (v) the Wetlands Management Unit (established under Part D.2 of the Project), and (vi) the Ghana Survey School, under terms of reference acceptable to the Association; and

(b) shall cause the University of Ghana to operate the RSAU under terms of reference acceptable to the Association.

2. Each Project Operations Committee, in consultation with EPC/TS, shall:

(a) not later than January 1, 1993 and each June 1 thereafter submit to the Association for its comments a proposed annual program for the subsequent calendar year covering plans for formal education and training, workshops, public awareness campaigns and other actions related to the efficient implementation of the Project; and

(b) not later than September 30 next following such submission, adopt such program as modified to take into account the comments of the Association.

3. EPC/TS shall coordinate the acquisition of technical assistance under this Agreement, the DANIDA Grant Agreement, the ODA Grant Agreement and the GET Grant Agreement, in consultation with the Association.

##### Parts A and B of the Project

4. The Borrower shall, through EPC/TS, establish inter-sectoral networks of government agencies, operating under terms of reference acceptable to the Association, to support the Borrower's environmental planning, monitoring, management and enforcement activities.

5. EPC/TS shall, not later than January 1, 1994, adopt a human resource development plan and establish a scheme of service acceptable to the Association, and shall thereafter promptly implement such plan and apply such criteria.

6. The EPC/TS shall, in carrying out Part A.1(c) of the Project, commission studies relating to: (a) the Volta River Basin, (b) coastal wetlands, (c) environmentally sustainable development strategies, (d) district level environmental problems, and (e) hydrological improvements to Sakumo Lagoon, each under terms of reference approved by the SI Project Operations Committee and acceptable to the Association.

7. EPC/TS shall, not later than June 1, 1993, submit to the Association for its comments a communications strategy to carry out the public awareness program under Part A.3 of the Project, and shall thereafter promptly implement such strategy as revised to incorporate the comments of the Association. The public awareness

program shall support the use of electronic media and print campaigns and of non-governmental organizations, and shall include a component directed specifically at rural areas.

8. In carrying out Part B.1 of the Project, EPC/TS shall:

(a) establish, not later than June 1, 1993, environmental quality criteria and identify sampling sites approved by the EQ Project Operations Committee and acceptable to the Association;

(b) establish not later than December 1, 1993, threshold standards of quality acceptable to the Association, and thereafter review by December of each subsequent year such criteria, thresholds and sites in consultation with the Association; and

(c) cause, and oversee, the undertaking of analyses of such samplings (i) by CSIR's Institute of Aquatic Biology and Water Resources Research Institute, and (ii) by other laboratories inspected and approved by the Ghana Standards Board under terms of reference acceptable to the Association.

9. For purposes of Part B.2 of the Project, the principal of the Ghana Survey School, together with instructors in adequate numbers, shall be appointed and be in place not later than June 1, 1993, under terms of reference and with qualifications and experience acceptable to the Association. Any subsequent vacancy in any such positions shall be promptly filled in a manner acceptable to the Association.

10. For purposes of carrying out Part B.3 of the Project, RSAU shall:

(a) be staffed, not later than March 1, 1993, under terms of reference and with personnel acceptable to the Association; and

(b) establish, not later than June 1, 1994, nomenclature and classifications for land use mapping approved by the LI Project Operations Committee and acceptable to the Association.

11. The Borrower shall:

(a) not later than March 1, 1993, cause (i) CSIR's Institute of Aquatic Biology, Water Resources Research Institute, and Soils Research Institute, (ii) the Meteorological Services Department, (iii) RSAU, and (iv) the Lands Commission to sign a memorandum of understanding with EPC/TS, acceptable to the Association, delineating their respective rights and responsibilities with respect to the provision of services, payments and other undertakings required to carry out Part B of the Project; and

(b) thereafter cause such entities to comply with the terms of such memorandum, unless the Association shall otherwise agree.

12. The SI Project Operations Committee shall consult with the Association at least once every six months regarding the evolution and results of studies carried out under Parts A and B of the Project.

Part C of the Project

13. In carrying out Part C.1 of the Project, the Borrower shall establish and operate at least 3 field-based land management teams under terms of reference acceptable to the Association.

14. The Borrower shall operate, through the LWM Project Operations Committee, the land management fund referred to in Part C.4 of the Project under terms of reference acceptable to the Association. The LWM Project Operations Committee shall review such terms of reference periodically in consultation with the Association.

Part D of the Project

15. In carrying out Part D of the Project, the Borrower shall, not later than June 1, 1993, survey and establish boundary markers for the Ramsar Sites as agreed upon with the Association. The Borrower shall, not later than December 31, 1993, take all legislative and administrative action agreed upon with the Association to establish the Ramsar Sites as protected by the principles of the Ramsar Convention under the laws of the Borrower. The Borrower shall manage the Ramsar Sites in accordance with the principles of the Ramsar Convention, as supplemented by the Regina Conference Recommendation, including the requirement that the Borrower promote the wise use of the Ramsar Sites. In accordance with the provisions of the Regina Conference Recommendation, "wise use of the Ramsar Sites" shall mean for this purpose: "their sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem."

16. The Borrower shall:

(a) maintain the Ramsar Sites as listed sites for purposes of the Ramsar Convention; and

(b) comply with the terms of the Ramsar Convention.

17. The Borrower shall operate the investment support fund referred to in Part D.4 of the Project under terms of reference acceptable to the Association.

18. Not later than June 1 of each year, MLNR's Game and Wildlife Department shall adopt a program to monitor Part D of the Project, approved by the CWM Project Operations Committee and acceptable to the Association, which program shall, among other things, require the preparation by the following April 1 of a report describing the results of such monitoring program.

19. Not later than June 1, 1995, the Borrower shall adopt a detailed design and management plan, acceptable to the Association, for an education and research center at Songor, and shall thereafter implement such plan in a timely manner.

#### SCHEDULE 5

##### Special Account

1. For the purposes of this Schedule:

(a) the term "eligible Categories" means Categories (1) through (5) set forth in the table in paragraph 1 of Schedule 1 to this Agreement;

(b) the term "eligible expenditures" means expenditures in respect of the reasonable cost of goods and services required for the Project and to be financed out of the proceeds of the Credit allocated from time to time to the eligible Categories in accordance with the provisions of Schedule 1 to this Agreement; and

(c) the term "Authorized Allocation" means an amount equivalent to \$650,000 to be withdrawn from the Credit Account and deposited into the Special Account pursuant to paragraph 3 (a) of this Schedule.

2. Payments out of the Special Account shall be made exclusively for eligible expenditures in accordance with the provisions of this Schedule.

3. After the Association has received evidence satisfactory to it that the Special Account has been duly opened, withdrawals of the Authorized Allocation and subsequent withdrawals to replenish the Special Account shall be made as follows:

(a) For withdrawals of the Authorized Allocation, the Borrower shall furnish to the Association a request or requests for a deposit or deposits which do not exceed the aggregate amount of

the Authorized Allocation. On the basis of such request or requests, the Association shall, on behalf of the Borrower, withdraw from the Credit Account and deposit into the Special Account such amount or amounts as the Borrower shall have requested.

- (b) (i) For replenishment of the Special Account, the Borrower shall furnish to the Association requests for deposits into the Special Account at such intervals as the Association shall specify.
- (ii) Prior to or at the time of each such request, the Borrower shall furnish to the Association the documents and other evidence required pursuant to paragraph 4 of this Schedule for the payment or payments in respect of which replenishment is requested. On the basis of each such request, the Association shall, on behalf of the Borrower, withdraw from the Credit Account and deposit into the Special Account such amount as the Borrower shall have requested and as shall have been shown by said documents and other evidence to have been paid out of the Special Account for eligible expenditures.

All such deposits shall be withdrawn by the Association from the Credit Account under the respective eligible Categories, and in the respective equivalent amounts, as shall have been justified by said documents and other evidence.

4. For each payment made by the Borrower out of the Special Account, the Borrower shall, at such time as the Association shall reasonably request, furnish to the Association such documents and other evidence showing that such payment was made exclusively for eligible expenditures.

5. Notwithstanding the provisions of paragraph 3 of this Schedule, the Association shall not be required to make further deposits into the Special Account:

(a) if, at any time, the Association shall have determined that all further withdrawals should be made by the Borrower directly from the Credit Account in accordance with the provisions of Article V of the General Conditions and paragraph (a) of Section 2.02 of this Agreement; or

(b) once the total unwithdrawn amount of the Credit allocated to the eligible Categories, less the amount of any outstanding special commitment entered into by the Association pursuant to Section 5.02 of the General Conditions with respect to the Project, shall equal the equivalent of twice the amount of the Authorized Allocation.

Thereafter, withdrawal from the Credit Account of the remaining unwithdrawn amount of the Credit allocated to the eligible Categories shall follow such procedures as the Association shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Association shall have been satisfied that all such amounts remaining on deposit in the Special Account as of the date of such notice will be utilized in making payments for eligible expenditures.

6. (a) If the Association shall have determined at any time that any payment out of the Special Account: (i) was made for an expenditure or in an amount not eligible pursuant to paragraph 2 of this Schedule; or (ii) was not justified by the evidence furnished to the Association, the Borrower shall, promptly upon notice from the Association: (A) provide such additional evidence as the Association may request; or (B) deposit into the Special Account (or, if the Association shall so request, refund to the Association) an amount equal to the amount of such payment or the portion thereof not so eligible or justified. Unless the Association shall otherwise



agree, no further deposit by the Association into the Special Account shall be made until the Borrower has provided such evidence or made such deposit or refund, as the case may be.

(b) If the Association shall have determined at any time that any amount outstanding in the Special Account will not be required to cover further payments for eligible expenditures, the Borrower shall, promptly upon notice from the Association, refund to the Association such outstanding amount.

(c) The Borrower may, upon notice to the Association, refund to the Association all or any portion of the funds on deposit in the Special Account.

(d) Refunds to the Association made pursuant to paragraphs 6 (a), (b) and (c) of this Schedule shall be credited to the Credit Account for subsequent withdrawal or for cancellation in accordance with the relevant provisions of this Agreement, including the General Conditions.

