#### AIDE MEMOIRE L2968 (VIE): LOW CARBON AGRICULTURE SUPPORT PROJECT

# Project Completion Review Mission Viet Nam, 9-20 April 2021

#### I. INTRODUCTION

- 1. On 12 December 2012, the Asian Development Bank (ADB) approved a loan in the amount equivalent to SDR48,170,000 (US\$74 million equivalent) to the Socialist Republic of Viet Nam to implement the Low Carbon Agriculture Support Project (the project). The Loan Agreement was signed on 7 March 2013 and became effective on 5 June 2013 and closed on 30 June 2020.
- 2. The impact was less agriculture-related pollution, as measured by better water quality due to reduced impact of livestock waste effluence. The expected outcome was greater uptake of climate-smart agricultural waste management practices (CSAWMP), as measured by increased use of clean biogas energy and organic bio-slurry fertilizers. To achieve this outcome, original outputs were: (i) expanded use of livestock waste management infrastructure; (ii) credit line for biogas value chains (BVC); (iii) enhanced CSAWMP technology transfer; and (iv) effective project management.
- 3. Project implementation was carried out by an executing agency (EA) the Ministry of Agriculture and Rural Development (MARD) that allocated responsibility to its Agricultural Projects Management Board (APMB) and subservient Central Project Management Unit (CPMU) and 12 implementing agencies (IAs) comprising 10 participating provincial people's committees (Bac Giang, Ben Tre, Binh Dinh, Ha Tinh, Lao Cai, Nam Dinh, Phu Tho, Soc Trang, Son La, and Tien Giang) and two financial intermediaries (FIs) being Viet Nam Bank for Agriculture and Rural Development (VBARD) and Co-operative of Viet Nam (Co-op Bank).
- The project completion review mission<sup>1</sup> (the Mission) was conducted from 9 to 20 April 4. 2021. The kick-off meeting in Ha Noi on 9 April 2021 was attended by representatives of MARD, APMB, CPMU and FIs, after which the Mission visited Soc Trang, Ben Tre, Lao Cai, Bac Giang and Nam Dinh provinces and MARD's National Fertilizer Testing Center and Center for Informatics and Statistics. The Mission met representatives of the EA and 12 IAs to: (i) assess the adequacy of preparation, design, implementation arrangements and due diligence. including how problems were identified and handled, whether they were foreseen as potential risks at appraisal, and the adequacy of the solutions adopted during implementation; (ii) evaluate relevance and adequacy of project design at appraisal and at completion, effectiveness in achieving outcomes and attribution to the project by assessing achievements of output targets, efficiency in delivering outputs, and sustainability of achieving output and outcome targets: (iii) evaluate initial operations of project outputs, their benefits, and the likelihood of sustainability of benefits considering current trends in the agriculture sector, legal and regulatory mechanisms, and operations and maintenance practices: (iv) evaluate the performance of the project stakeholders, including the borrower, EA and ADB; and (v) recommend any other steps that the borrower and EA need to take to ensure the project's sustainable operations.
- 5. This Aide Memoire summarizes the findings of the Mission and agreements reached for the project finalization, which were discussed at a wrap-up meeting on 7 May 2021 in Ha

<sup>&</sup>lt;sup>1</sup> The Mission comprised Vu Ngoc Chau, Senior Project Officer (ANR)/Mission Leader, Truong Thi Minh Hue, Project Analyst, Pham Quang Phuc (Sr. Environment Officer), Nguyen Thanh Giang (Sr. Gender Officer), Kevin Rutter (International Evaluation Specialist) and Tran Viet Dzung (National Evaluation Specialist). Dinh Kieu Oanh (Social Development Officer) and Le Thi Quynh Trang (Associate Financial Management Officer) provided the inputs on their respective areas.

Noi. The agreements recorded in this Aide Memoire are subject to the approval of higher authorities of ADB and the government. The list of key persons met is attached as Appendix 1

#### II. MAIN FINDINGS AND ISSUES

#### A. Overall Project Implementation

6. The project was physically completed on 30 June 2020. The winding-up period expired on 30 October 2020. Financial closure is pending awaiting the last withdrawal application (\$140,979 for Bac Giang PPMU).

#### **Output 1: Expanded Use of Livestock Waste Management Infrastructure**

7. As of 30 June 2020, achievements were as follows: (i) 62,248 SBPs,<sup>2</sup> 83 MBPs<sup>3</sup> and two LBPs<sup>4</sup> were constructed of which 6,581 (10.6%) biogas plants were constructed for ethnic minority households; (ii) the incentives for carbon market development (ICMD) funds were deposited in 62,333 beneficiary accounts; (iii) 117,447 SBP operators (52.7% being women), 566 masons (5.1% being women), 1,281 technicians (23.4% being women), 30 engineers (16.7% being women) and 18 contractors were trained. In total the Project has delivered 2,211 training courses; and (iv) 47,640 biogas plants have been recorded in the biogas plant database.

# Output 2: Credit Lines for BVCs and other climate smart agriculture waste management investments

8. The two FIs provided 457 sub-loans in five of the 10 project provinces with a total loan amount of \$0.744 million. On 17 December 2018, the government requested cancellation of \$30 million allocated to this output that ADB approved on 19 December 2018. Both FIs, (VBARD and Co-opBank) refunded the unused advance account balances to ADB.

#### **Output 3: Enhanced CSAWMP Technology Transfer**

9. Seven research package contracts expired on 30 June 2020. Three of the seven achieved intended research targets (packages 27, 29 and 42). The remaining packages (25, 26, 28 and 43) failed to deliver expected outputs. The cumulative disbursement of research packages was 50.6% of contract award amounts. Disbursement under package 43 was zero against 40% physical completion. CPMU explained that the consultant failed to submit supporting documentation for payment. Twelve demonstration packages (including five replication packages) were completed. The cumulative disbursement of demonstration packages was 99.9% of the awarded amount.

# **Output 4: Effective Project Management**

10. CPMU and 10 PPMUs were established in second quarter of 2013 and were fully staffed. 57 out of 124 staffs (equivalent to 45.97%) of the CPMU and PPMUs were women. The gender focal point was appointed since July 2016. PPMUs with sex-disaggregated and ethnicity data collected and reported is operating effectively in 7 provinces, except Son La, Nam Dinh, Soc Trang PPMUs and CPMU. LIC contract was extended lately (more than 10 months since ADB issued NOL) until 30 June 2020, however, insufficient technical support was provided as CPMU could not mobilize LIC's experts to support reviewing and monitoring research packages, and prepare PCR, GAP, and Social Safeguards final reports as required

<sup>&</sup>lt;sup>2</sup> SBP has a capacity of up to 50 cubic meters.

<sup>&</sup>lt;sup>3</sup> MBP has a capacity of 51 – 499 cubic meters.

<sup>&</sup>lt;sup>4</sup> LBP has a capacity of above 499 cubic meters.

by ADB and Government. This leads to delaying completion of the project activities by the loan closing date.

- 11. **Summary of project procurement.** The project comprised 19 consulting services packages (including research packages) at a total cost of \$7.82 million and 25 packages for the procurement of goods for a total cost of \$6.93 million. All packages were awarded.
- 12. **Summary of Project Financing**. For the ADB loan, the cumulative contract award and disbursement were \$32.953 million and \$30.49 million equivalent to 88% and 81% respectively, of the net loan amount of \$37.441 million. For counterpart funds (according to the draft Borrower project completion report), the cumulative disbursement of counterpart funds was \$3.08 million (equivalent to 85% of the total requirements of \$3.611 million). For Fls' counterpart funds, the cumulative disbursement of 2 Fls' counterpart funds was \$0.20 million.

### B. Financial Management

- 13. Both Fls submitted final audited project financial statements for the period 1 January to 30 June 2019 in a timely manner that were accepted and disclosed by ADB in 2020. The Fls' audited entity financial statements for FY2019 were submitted in a timely manner, reviewed by ADB with no further follow-up required.
- 14. The CPMU submitted its audited project financial statements covering the period 1 January 2019 to 30 June 2020 on 27 October 2020. This submission was rejected following ADB's review due to the ambiguity of the qualified opinion on the use of funds and incomplete project expenditures, that did not reconcile with ADB records (as discussed during the meeting organized by ADB with CPMU and the auditors on 27 November 2020). The auditors and CPMU confirmed that revised final audited project financial statements would be submitted to ADB by 30 June 2021. The CPMU also committed to resolve the remaining management letter issues identified by the auditors before the final submission to ensure smooth project closing.
- 15. The financial management risks identified during project preparation and mentioned in the PAM were adequately addressed and mitigated during project implementation.

# C. Environment Management

- 16. The Mission noted the first IEE for Binh Dinh MBP was submitted by CPMU, endorsed by ADB and uploaded to ADB's website, however, the subsequent MBP IEEs that were endorsed by CPMU have not submitted to ADB for endorsement. Similarly, report on environment impacts resulting from project closure has not been submitted to ADB for review and uploading. The semi-annual environment monitoring report for January to June 2020 was submitted lately on 12 April 2021. Seven semi-annual environment monitoring reports were prepared (to cover the construction phase from June 2016 to Dec 2019) and submitted by CPMU and uploaded on ADB website.
- 17. During site visits to SBPs and MBPs in Soc Trang and Ben Tre provinces, the Mission found that, in general, the project contributed to reducing surplus livestock manure though biogas plants and manure separators for use as fertilizer. Consequently, pollution and poor sanitation from livestock waste in rural areas have been improved. Biogas operations and maintenance training were provided by the CPMU to support sustainable and safe operations of SBPs and MBPs. The PPMUs reported no accidents relating to ignition in biogas plant operations. However, the Mission noted some issues concerning non-compliance with the

<sup>&</sup>lt;sup>5</sup> The CPMU's original deadline for submission was 31 December 2020, that was extended by six months due to COVID-19 pandemic following ADB's letter to all ADB-funded projects in Viet Nam on 17 April 2020.

design and operation of SBPs and MBPs that contribute to incremental pollution and poor sanitation effluent disposal including (i) water saving measures in cleaning pigsty floor had not been adopted causing ineffective manure digestion in the biogas plant. The manure supply exceeds the digester capacity and overflowed to environment, (ii) few farmers treated water from the environmental tanks in segmented chambers to compost carbon rich materials such as paper, wood chips, garden waste, etc. resulting in the discharge of polluted water from biogas, and (iii) wastewater ponds have been used for wastewater treatment after MBPs, but no design standards nor operation manuals were prepared and no monitoring of effectiveness of waste water treatment was undertaken.

#### D. Resettlement and Ethnic Minority Development Plan Implementation

18. The project was classified as category C for involuntary resettlement and category C for indigenous peoples. The project had positive impacts on ethnic minority (EM) people and communities. During the implementation, all activities for EMs specified in the ethnic minority development plans (EMDP) have been integrated in all project activities – the same as for Kinh people. The monitoring system on EMDP implementation was established with safeguard officers appointed in the CPMU and each PPMU to coordinate and supervise EMDP implementation. Semi-annual monitoring reports on EMDP implementation were prepared during implementation. These reports were uploaded on ADB website. At the time of the Mission, the report on EMDP completion was under CPMU revision.

#### E. Gender Action Plan Implementation

The project is categorized as effective gender mainstreaming and a gender action plan (GAP) prepared and modified after the MTR. The original GAP had 19 actions including 13 quantitative performance targets. There were 12 indicators related to gender in the DMF in which 10 corresponded to GAP targets. At project completion, there were seven actions and 13 targets in the GAP and DMF, of which all seven actions were completed, 11 out of 13 targets were achieved and two targets were not. Key GAP achievements included (i) 305 women out of 1,332 (22.9%) technical staff, engineers and contractors participated in training courses on biogas management and technical issues for technical workers (compared to a target of 20%); (ii) 62,018 women among 117,447 participants (52.8%) were trained in the utilization of biogas technology and operation and maintenance (the target being 50%); (iii) All 457 (100%) households receiving credit (through joint husband-wife accounts (target was 50%); (iv)13,410 (50.5%) women among 26,538 farmers participating in CSAWMP (target being 50%); (v) 578 women among 1,739 extension staff and researchers trained in CSAWMP technology (33.2% against a target of 30%); (vi) 127 women among 366 participants (34.7%) participated in training courses on O&M of research equipment (the target being 30%); and (vii) 56 women among 129 CPMU and PPMU staff (43.4%) were trained in aspects of project management (the target being 30%). The project developed a sex-disaggregated monitoring and evaluation database of all project activities. The GAP monitoring results were regularly updated and attached to project quarterly progress reports.

#### F. Compliance with Loan Covenants

20. The Mission found 46 of 47 loan covenants complied with. One loan covenant (covenant 38) regarding implementation of the GAP was partially complied with due to the proportion of women participating in project training and dissemination events. Details for the status of compliance with all loan covenants are given in Appendix 2.

#### G. Borrower's PCR Preparation

21. Preparation of the Borrower's project completion report was initially included in the terms of reference for the loan implementation consultants yet their contract was terminated prior to the completion of this task. As a result, APMB recruited an additional consultant using

counterpart funds to prepare the report. CPMU is in the process of reviewing the uncompleted and lately submitted report and already recognizes a number of errors in the information provided in the submitted draft.

### H. Other Findings

- 22. The Mission identified the following issues that require follow-up actions:
  - The decline in pig numbers country-wide is due to the outbreak of African Swine Fever<sup>6</sup> and low pig prices at the commencement of the outbreak. This has contributed to diminished demand for new digesters and ceased pig rearing operations where digesters have already been installed as many as 10% of installed digesters in some locations.
  - Biogas Plant Database. As of the mission date, 47,640 biogas plants (76.43%) financed by the project were recorded in the national biogas plant (BP) database. However, only 14,187 of the recorded BPs (22.85%) provided sufficient data to qualify for participation in the carbon market (0% in Bac Giang and Tien Giang, 4% in Soc Trang, 6% in Ha Tinh and 8% in Son La). Many BPs records do not have geographic coordinates to identify their precise locations. Several provinces, such as Son La, Nam Dinh, and Bac Giang reported software issues that prevented records from being entered and PPMU staff were unable to complete data entry to the system. Some provinces were reluctant to complete the database due to lack of funds as GPS equipment was provided late in the project that necessitated return visits to earlier installations.
  - **Research Packages**. Despite a 1-year extension to the project closing date, four research packages (25, 26, 28 and 43) were not completed in accordance with executed contracts. As of 30 June 2020, three packages (25, 26 and 28) and package 43 had completed four of six reports (66.7%) and two of five reports (40%) required under the contracts, respectively.
  - Asset Clearance. The Mission noted that all provinces had submitted outline proposals for the clearance of assets funded by project (including assets under the demonstration packages) and that the CPMU was amalgamating these for submission and consideration by the Ministry of Finance (MOF).
  - Environment Monitoring Equipment. The project financed the purchase a range of laboratory equipment that has been delivered to provincial analytical laboratories of sub-departments of livestock production and animal health. The process of identification for the supplied equipment was completed only partly in consultation with the laboratory staff. As such, not all equipment has been made operational. In Soc Trang, much of the supplied equipment remains unpacked from the original delivery containers while others such as autoclaves have general application to laboratory operations. The Mission noted that consumables required for their continued operation would place additional pressure on provincial budget allocations as these laboratories are not capable of recovering fees for analytical work undertaken. While the PPMU staff are not able to operate the environment analysing equipment, the Sub-department of Livestock Production, Veterinary and Aquaculture are not provided with sufficient budget to implement the livestock environment monitoring functions.

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<sup>&</sup>lt;sup>6</sup> The virus causes a hemorrhagic fever with high mortality rates in domestic pigs; some isolates can cause death of animals as quickly as a week after infection. Because of bio-security risks to visited pig producing and other livestock farms, some farmers requested limited access by team members to production areas during field visits.

#### III. RECOMMENDATIONS AND FOLLOW-UP ACTIONS

- 23. The recommendations of the Mission and follow-up actions are as follows:
  - BP monitoring. The Mission requested DARDs maintain the monitoring program of digester operations set during the implementation and provided appropriate support to ensure that, when pig and livestock production recommences, digester operations are returned to full operational status.
  - Biogas plant database. DARDs, with support from CPMU to complete data entry for all BPs funded by the project to the national biogas plant database to ensure that they qualify to participate in the carbon market.
  - For the Research Packages. The Mission requests that MARD further evaluates achievements of the packages 25, 26, 28 and 43 and allocate sufficient State budget to complete if the research results are useful and potential for replication.
  - Asset Clearance. The Mission requested the proposal for asset clearance be finalized and submitted to MOF by 15 May 2021 so that (i) recipient farmers can exercise their decisions whether to purchase the demonstration equipment or remove the assets from farmers' properties for disposal by the appropriate method, (ii) other assets will be handled to and used effectively by the end users. The Mission requested the clearance of assets be completed by 30 June 2021.
  - Environment Monitoring Equipment. MARD to request DARDs to hand over completely to relevant sub-departments (e.g. Sub-department of Livestock Production, Veterinary and Aquaculture) to ensure that equipment supplied under the project would be installed, utilized and maintained for their intended purpose to facilitate environmental monitoring of gas emissions and waste material from the digesters. To strengthen environment pollution supervision in livestock activities and sustainable operation of environment monitoring equipment, the Mission propose MARD and the project provinces should institutionalize the function of environment monitoring in Sub-department of Livestock Production, Veterinary and Aquaculture under provincial DARDs. The equipment provided should be managed and used with in an established diagnostic laboratory that is funded by provincial budget allocations.
  - The CPMU is requested to submit a revised APFS by 30 June 2021.
  - **EMDP Implementation.** The Mission requested that CPMU will submit the revised report by 15 May 2021 for clearance and uploading.
  - Environment management implementation. The Mission recommended that MARD standardize the design of effluent treatment in SBPs and MBPs to improve environment and sanitary conditions in rural area. Selected measures resulting from project financed research could be applied. DARDs should continue to provide awareness raising training to farmers for enhancing sanitation in livestock waste treatment. The Mission requested CPMU (i) to submit subsequent MBP IEEs that were endorsed by CPMU, (ii) its semi-annual environment monitoring report for January to June 2020, and (iii) report on environment impacts resulting from project closure and dismantling by 15 May 2021 to ADB for review and uploading.
  - Borrower PCR. The CPMU is requested to finalize the Borrower PCR and resubmit to ADB by 30 April 2021.

# 24. **Schedule.** ADB will process the completion report for circulation to ADB Board as follows:

Deliverables	Estimated Submission
Completion of final draft PCR	15 May 2021
Draft PCR reviewed by VRM's PAU Head	30 May 2021
Interdepartmental circulation of draft PCR	10 June 2021
Circulation of draft PCR to the Government	1 July 2021
The Government comments provided by CPMU to ADB	15 July 2021
PCR submitted for approval of ADB	30 July 2021
Circulation of the PCR to ADB Board	10 August 2021

# IV. ACKNOWLEDGMENT

25. The Mission expresses its appreciation to MARD, CPMU, PPMUs and all staff and representatives of the organizations who provided their time and cooperation to the Mission.

Signed in Ha Noi on 7 May 2021 by:

Vu Ngoc Chau Mission Leader, VRM Asian Development Bank

Attachments

Attachment 1 List of persons met

Attachment 2 Compliance of Loan Covenants

# **List of Key Persons Met**

Name	Position	Email Account	Tel. No
MARD			
Lê Minh Tuấn	Officer, Department of International Cooperation	Tuanlm.htqt@mard.gov.vn	0981626888
Agricultural Projects Managem	nent Board		
Đặng Hữu Kiên	Officer - Consultant Management Department		
Central Project Management U	nit		
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Trần Thị Kiều	Household, Mo Cay Bac District		
Nguyễn Nam Phong	Shrimp farm, Ba Tri District		
Nguyễn Văn Thuật	Builder, Mo Cay Nam District		
Võ Văn Sol	Builder, Mo Cay Nam District		
Soc Trang province			
Trương Văn Đúng	Deputy Director, DARD		

Lâm Minh Hòang	Project Director, PPMU	Lamhoangst68@gmail.com	0918553550
Huỳnh Đức Thắng	Technical Officer, PPMU		
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Nguyễn Thị Kha	Technician, Yen Dung District		0369674867
Nguyễn Văn Hòa	Builder, Yen Dung District		0397585207
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# APPENDIX 6. STATUS OF COMPLIANCE WITH LOAN COVENANTS

No.	Schedule	Description	Notes	Туре
1	Article 4.	(a) The Borrower shall cause the FIs to carry out the Project with due diligence and efficiency and in conformity with	Complied with	Financials
		sound applicable technical, financial, business and development practices.		
2	Article 4.	(b) In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause to be	Complied with	Others
		performed, all the obligations set forth in Schedule 5 to this Loan Agreement and the Project Agreement.		
3	Schedule 5	The Borrower shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in	Complied with	Others
		the PAM. Any subsequent change to the PAM shall become effective only after approval of such change by the		
		Borrower and ADB. In the event of any discrepancy between the PAM and the Loan Agreement, the provisions of the		
		Loan Agreement shall prevail.		
4	Article 3.	The Borrower shall cause the proceeds of the Loan to be applied to the financing of expenditures on the Project in	Complied with	Financials
		accordance with the provisions of this Loan Agreement and the Project Agreement.		
5	Article 3.	The Borrower shall enter into a Subsidiary Loan Agreement with each FI, providing inter alia for the relending of part	Complied with	Financials
		of the proceeds of the Loan not exceeding twenty-three million two hundred and thirty-nine thousand Special Drawing		
		Rights (SDR 23,239,000) in aggregate to all Fls, the carrying out by the Fls of the Project activities described in Part 2		
		of paragraph 2 of Schedule 1 to the Loan Agreement, and the rights of the Borrower and ADB with respect thereto.		
		Such Subsidiary Loan Agreements shall contain terms and conditions acceptable to ADB, and shall be without prejudice		
		to, and without limitation on, the obligations of the Borrower under the Loan Agreement.		
6	Article 4.	(a) The Borrower shall (i) maintain separate accounts and records for the Project; (ii) prepare annual financial	Complied with	Financials
		statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial		
		statements audited annually by independent auditors whose qualifications, experience and terms of reference are		
		acceptable to ADB, in accordance with international standards for auditing or the national equivalent acceptable to		
		ADB; (iv) as part of each such audit, have the auditors prepare a report (which includes the auditors' opinion on the		
		use of the Loan proceeds and compliance with the financial covenants of this Loan Agreement as well as on the use of		
		the procedures for the imprest fund and statement of expenditures) and a management letter (which sets out the		
		deficiencies in the internal control of the Project that were identified in the course of the audit. if any); and (v) furnish		
		to ADB, no later than 6 months after the end of each related fiscal year, copies of such audited financial statements,		
		audit report and management letter, all in the English language, and such other information concerning these		
		documents and the audit thereof as ADS shall from time to time reasonably request.		
7	Article 4.	(b) ADB shall disclose the annual audited financial statements for the Project within 30 days of the date of their receipt	Complied with	Financials
		by posting them on ADB's website.		
8	Article 4.	(c) The Borrower shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and the	Complied with	Financials
		Borrower's financial affairs where they relate to the Project with the auditors appointed pursuant to subsection (a)(iii)		
		hereinabove and shall authorize and require any representative of such auditors to participate in any such discussions		

No.	Schedule	Description	Notes	Туре
		requested by ADB. This is provided that such discussions shall be conducted only in the presence of an authorized		
		officer of the Borrower, unless the Borrower shall otherwise agree.		
9	Schedule 5	(a) Within 12 months of the date of effectiveness of the Loan Agreement, the Borrower shall submit written evidence	Complied with	Others
		satisfactory to ADB showing that a TSU has been established under the CPMU to undertake Project-advisory activities		
		as described in the PAM.		
10	Schedule 5	(b) The evidence to be delivered under paragraph (a) above shall: (i) provide the names of counterpart staff from the	Complied with	Others
		government agencies specified in the PAM who together will comprise the TSU; and (ii) provide the name of the head		
		of the TSU, who shall be determined during Project		
		implementation.		
11	Schedule 5	(c) The Borrower shall ensure or cause CPMU to ensure that no amount is deposited into the TSU's sub-account unless	Complied with	Others
		and until the Borrower has complied with paragraphs (a) and (b) above and the terms of reference for each member		
		of the TSU have been agreed with ADB. Such terms of reference shall reflect the purely technical and advisory role of		
		the TSU and shall not include any activities related to Project management or implementation, which shall be		
		undertaken by the Project Executing Agency and IAs only.		
12	Schedule 5	The Borrower shall ensure that each Subsidiary Loan, unless otherwise agreed by ADB: (i) is denominated in Dong; (ii)	Complied with	Financials
		has a maturity, grace period and interest rate to be determined by the Borrower in accordance with the Borrower's		
		lending practices applicable to the onlending of funds externally borrowed by the Borrower; and (iii) is made under		
42	A .: 1 2	such other terms and conditions acceptable to ADB.	0 1: 1 ::1	-· · ·
13	Article 3.	The Borrower shall cause the FIs to onlend the proceeds of the Subsidiary Loans to Eligible Beneficiaries under Subloan	Complied with	Financials
		Agreements, under Part 2 of paragraph 2 of Schedule 1 to the Loan Agreement and in accordance with the provisions		
14	Article 4.	of the Loan Agreement.  In addition to the reports and information set forth in Section 6.05 of the Loan Regulations, the Borrower shall furnish,	Complied with	Financials
14	Article 4.	or cause to be furnished, to ADB all such reports and information as ADB shall reasonably request concerning (a) the	Complied with	Fillalicials
		Eligible Beneficiaries, the Eligible Subprojects and the Subloans; and (b) the administration, operations and financial		
		condition of each Fl.		
15	Article 4.	The Borrower shall enable ADB's representatives to inspect the Project, the Goods and Works, any Eligible Beneficiary,	Complied with	Others
	7 61.61.6	any Eligible Subproject, and any relevant records and documents.	осрос	
16	Article 3.	The proceeds of the Loan shall be allocated and withdrawn in accordance with the provisions of Schedule 3 to the	Complied with	Financials
		Loan Agreement, as such Schedule may be amended from time to time by agreement between the Borrower and ADB.	•	
17	Schedule 5	For each Biogas Value Chain Infrastructure construction project to be financed by a Subloan under Part 2 of paragraph	Complied with	Financials
		2 of Schedule 1 to the Loan Agreement, the Borrower shall cause the relevant FI to ensure that: (i) such Subloan is	•	
		made only to Eligible Beneficiaries for Eligible Subprojects; (ii) the Biogas Plant is constructed by certified masons or		
		contractors who will certify compliance with the relevant technical and environmental standards specified in the		
		Subproject Eligibility Criteria; and (iii) the Subproject Eligibility Criteria is incorporated into each FI's standard loan		

No.	Schedule	Description	Notes	Туре
		eligibility criteria to ensure the targeted clients under the Project is reached and the Project objectives are achieved.		
18	Article 3.	Except as ADB may otherwise agree, the proceeds of the Subsidiary Loans shall be used only for making Subloans to Eligible Beneficiaries for Eligible Subprojects and shall be applied exclusively to the cost of Goods and Works and other items of expenditure required to carry out such Eligible Subprojects.	Complied with	Financials
19	Article 4.	The Borrower shall promptly take all action, including the provision of funds, facilities, services and other resources, which shall be necessary on its part to enable the Fls to perform their respective obligations under the Project Agreement, and shall not take or permit any action which would interfere with the performance of such obligations.	Complied with	Financials
20	Schedule 5	For each medium and each large Biogas Value Chain Infrastructure construction project to be financed by a Subloan under Part 2 of paragraph 2 of Schedule 1 to the Loan Agreement, the Borrower shall prioritize construction of such plant in a CLZ (if any).	Complied with	Others
21	Schedule 5	The Borrower shall ensure that: (i) the Fls together provide counterpart financing in an amount not less than \$6,300,000 in aggregate to finance the Project activities described in Part 2 of paragraph 2 of Schedule 1 to the Loan Agreement; (ii) for each Subloan, a maximum of 85% of the original principal amount of that Subloan is financed from a Subsidiary Loan, a minimum of 15% is financed from the relevant Fl's own funds and the recipient borrower of the Subloan shall be contributed in-kind including by providing available local materials and/or labor of equivalent value; (iii) each Subloan has an interest rate as agreed by MOF and the Fl concerned as set out in the relevant Subsidiary Loan Agreement; (iv) the interest rate for each Subloan is determined based on market interest rates; and (v) each Subloan has such other terms and conditions as required in the Guidelines for Biogas Value Chains and any other terms and conditions as the relevant Fl may have in extending loans to customers from time to time in the ordinary course of its business. In determining the applicable interest rate and other terms and conditions for a Subloan, the Borrower and the Fls shall take into consideration, and hence ensure, that Eligible Beneficiaries have access to affordable financial sources for construction of Biogas Plants and the Borrower shall ensure or cause the Fls to ensure that no amendments, waivers, supplements or other modifications are made to the terms and conditions of any Subloan which would jeopardize this principle.	Complied with	Financials
22	Article 3.	Except as ADB may otherwise agree, the Borrower shall procure, or cause to be procured, the items of expenditure to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement.	Complied with	Others
23	Article 4.	(a) The Borrower shall exercise its rights under the Subsidiary Loan Agreements in such a manner as to protect the interests of the Borrower and ADB and to accomplish the purposes of the Loan.	Complied with	Financials
24	Article 4.	(b) No rights or obligations under the Subsidiary Loan Agreements shall be assigned, amended, abrogated or waived without the prior concurrence of ADB.	Complied with	Financials
25	Article 3.	Withdrawals from the Loan Account in respect of Goods, Works and Consulting Services shall be made only on account of expenditures relating to:	Complied with	Others
		(a) Goods which are produced in and supplied from, and Works and Consulting Services which are supplied from such	Complied with	7

No.	Schedule	Description	Notes	Туре
		member countries of ADB as shall have been specified by ADS from time to time as eligible sources for procurement;		
		and		
		(b) Goods, Works and Consulting Services which meet such other eligibility requirements as shall have been specified	Complied with	
		by ADB from time to time.		
26	Schedule 5	The Borrower shall allocate a fund to Eligible Beneficiaries as a financial incentive to carry out Eligible Subprojects and	Complied with	Others
		supporting carbon market development. Such allocation shall be done in accordance with the PAM.		
27	Schedule 5	In respect of an Eligible Subproject, the Borrower shall ensure or cause the CPMU, PPMUs and Fls to ensure that	Complied with	Others
		allocated funds are not credited to the accounts of the relevant Eligible Beneficiaries until the PPMU associated with		
		that Eligible Subproject has confirmed to the relevant FI and ADB following due investigation and physical inspection		
		and such certifications as required under paragraph 4(ii) above, that such Eligible Subproject and certification has		
		complied with all technical, engineering, construction, environmental and other requirements and safeguards set out		
		in the Subproject Eligibility Criteria.		
28	Schedule 5	The Borrower shall ensure or cause the CPMU, PPMUs and Fls to ensure that the Subproject Eligibility Criteria is not	Complied with	Others
		amended, supplemented, waived, deferred or otherwise modified in any way without the prior consent of ADB.		
29	Schedule 5	The Borrower shall ensure that the portfolio of Subloans shall be accounted for and reported separately by the Fls in	Complied with	Financials
		such form and at such frequency as may be required by ADB.		
30	Schedule 5	The Borrower shall immediately notify ADB if at any time it receives information from an FI that: (i) the percentage of	Complied with	Financials
		non-performing Subloans financed by that FI is likely to exceed 5% of the aggregate outstanding amount of all Subloans		
		financed by that FI at that time; and (ii) the percentage of non-performing Subloans financed by that FI is likely to		
		exceed 10% of the aggregate outstanding amount of all Subloans financed by that FI at that time (the "NPL Limit"). If,		
		at any time, it receives information from an FI that the NPL Limit has been exceeded, until further notice given by ADB,		
		the Borrower shall immediately cease processing any current or pending withdrawal applications for Subsidiary Loans		
		to that FI and shall temporarily suspend all further disbursements under Subsidiary Loans to that FI.		
31	Schedule 5	The Borrower shall ensure or cause the Fls to ensure that none of the Subprojects involve any environmental,	Complied with	Safeguards
		involuntary resettlement impacts or impacts on indigenous peoples or ethnic minority groups which can be		
		categorized as Category A, all within the meaning of the Safeguard Policy Statement.		
32	Schedule 5	The Borrower shall ensure that: (i) the Project does not have any involuntary resettlement impacts within the meaning	Complied with	Safeguards
		of the Safeguard Policy Statement; and (ii) the site selected for any Subproject shall be situated on land already owned		
		by the Eligible Beneficiary thereby ensuring that the Subproject will not entail any land acquisition. In the event that		
		the Project does have any such involuntary resettlement impacts, the Borrower shall take all steps required to ensure		
		that the Project complies with the applicable laws and regulations of the Borrower and with the Safeguard Policy		
		Statement.		
33	Schedule 5	The Borrower shall ensure or cause the Fls to ensure that the preparation, design, construction, implementation,	Complied with	Safeguards
		operation and decommissioning of each Eligible Subproject and all Project facilities comply with: (i) all applicable laws		

No.	Schedule	Description	Notes	Туре
		and regulations of the Borrower relating to environment, health, and safety; (ii) the Environmental Safeguards; (iii)		
		the EARF; and (iv) all measures and requirements set forth in the respective IEE and EMP and any corrective or		
		preventative actions set forth in a Environmental Monitoring Report.		
34	Schedule 5	The Borrower shall ensure or cause the Fls to ensure that the preparation, design, construction, implementation and	Complied with	Safeguards
		operation of each Eligible Subproject complies with (i) all applicable laws and regulations of the Borrower relating to		
		ethnic minorities; (ii) the Indigenous Peoples Safeguards; and (iii) all measures and requirements set forth in the EMDP,		
		and any corrective or preventative actions set forth in an Environmental Monitoring Report.		
35	Schedule 5	The Borrower shall ensure that the EMDP prepared for the Project and agreed with ADB is updated and fully	Complied with	Safeguards
		implemented in a timely manner, and that adequate resources are allocated for this purpose.		
36	Schedule 5	17. The Borrower shall do the following or cause the Fls to do the following:	Complied with	Safeguards
		(a) submit semi-annual Environmental Monitoring Reports to ADB;	Complied with	
		(b) if any unanticipated environmental and/or social risks and impacts arise during Eligible Subproject implementation	Complied with	
		promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed		
		corrective action plan; and		
		(c) report any actual or potential breach of compliance with the measures and requirements set forth in the EARF and	Complied with	
		any EMP or EMDP promptly after becoming aware of the breach.		
37	Schedule 5	The Borrower shall cause the Project Executing Agency to ensure that: (i) the contracts for relevant Works contain	Complied with	Social safeguard
		provisions prohibiting use of child: labor and differentiation in wages		
		between male and female workers for work of equal value, in accordance with the relevant laws and regulations of		
		the Borrower; (ii) such contracts also include mandatory provisions on health, sanitation and appropriate working		
		conditions; and (iii) contractors and their workers observe local protocols concerning acceptable behavior towards the		
		local population.		
38	Schedule 5	The Borrower shall ensure that the gender action plan prepared for the Project and agreed with ADB is fully	Partially complied	Social safeguard
		implemented in a timely manner and that adequate resources are allocated for this purpose. The gender action plan	with. Specifically, all	
		for the Project ensures that: (i) at least 20% of those who are trained in biogas management and technical issues are	complied with except	
		women; (ii) at least 20% of those who are trained and certified as masons for the construction of small Biogas Plants	for (ii), (v), (ix) and (x)	
		are women and at least 80% of these women shall find employment; (iii) at least 50% of those trained on utilization		
		of biogas technology and operation and maintenance are women; (iv) at least 50% of those who are trained on farm		
		management and waste management on farms are women; (v) at least 30% of employees trained in medium Biogas		
		Plants and large Biogas Plants are women; (vi) at least 50% of recipients of Subloans from Fls will be registered under		
		husband-wife joint accounts or on behalf of women; (vii) at least 50% of official registration of all purchased biogas		
		units and plants under the Project will be under husband-wife joint accounts or on behalf of women; (viii) 30% of		
		research topics undertaken under Part 3 of paragraph 2 of Schedule 1 to the Loan Agreement relate to gender issues		
		associated with Biogas Plants; (ix) at least 40% of those selected as champions of smart-agriculture in research and		

No.	Schedule	Description	Notes	Туре
		dissemination of CSAWMP technology are women; (x) training materials of CSAWMP technology and methodology of		
		dissemination will be women-friendly and at least 50% of dissemination events and consultations will involve women-		
		only groups; (xi) a sexdisaggregated and ethnic minority data base is established as part of the Project's project		
		performance and monitoring system established by the CPMU; (xii) 30% of staff in the CPMU and		
		PPMUs are women and that the CPMU and each PPMU has a gender focal point; and (xiii) gender indicators are		
		included in the overall monitoring and evaluation framework for the Project.		
39	Schedule 5	The Borrower shall ensure that in all Project Provinces, information dissemination, education and mass -	Complied with	Social safeguard
		communication activities are carried out in a timely manner to promote the replication of biogas technology		
		application and utilization.		
40	Schedule 5	The Borrower shall ensure or cause the FIs to ensure that no proceeds of the Loan are used to finance any activity	Complied with	Others
		included in the list of prohibited investment activities provided in Appendix 5 of the Safeguard Policy Statement.		
41	Schedule 5	The Borrower shall comply with, and shall cause the Project Executing Agency, the TSU and each IA to comply with	Complied with	Others
		ADB's Anticorruption Policy (1998, as amended to date). The Borrower: (i) acknowledges that ADB reserves the right		
		to investigate directly, or through its agents, any alleged corrupt, fraudulent, collusive or coercive practice relating to		
		the Project; and (ii) agrees to cooperate with, and to cause the Project Executing Agency, the TSU and each IA to		
		cooperate fully with any such investigation and extend all necessary assistance, including providing access to all		
		relevant books and records, as may be necessary for satisfactory completion of such investigation and shall allow, and		
		cause the Project Executing Agency, the TSU and each IA to allow, ADB to investigate any violation or potential		
		violation of these undertakings. Borrower		
42	Schedule 5	Without limiting the generality of the preceding paragraphs, the Borrower shall: (i) ensure that the Project Executing	Complied with	Others
		Agency and each IA conduct periodic inspections on the contractors' activities		
		related to fund withdrawals and settlements; and (ii) ensure and cause the Project Executing Agency and each IA to		
		ensure that all bidding documents and contracts financed by ADB in connection with the Project include anticorruption		
		provisions acceptable to ADB including provisions specifying the right of ADB to audit and examine the records and		
		accounts of the contractors, suppliers, consultants, and other service providers as they relate to the Project.		
43	Schedule 5	If the Borrower or ADB is or becomes aware or has a reasonable suspicion that any member of the Project Executing	Complied with	Others
		Agency, TSU or any IA has engaged in corrupt or fraudulent practices (as defined in ADB's Anticorruption Policy (1998		
		as amended to date)) under or in connection with the Project or the Loan, the Borrower shall take such timely and		
		appropriate action satisfactory to ADB to investigate and/or remedy the situation, including in the case of corrupt or		
		fraudulent practices of an FI, demanding immediate repayment or otherwise recovering any portion of the relevant		
		Subsidiary Loan, with such repayment or recovery to be promptly paid to ADB in prepayment of the Loan. If the		
		Borrower does not undertake investigative and/or remedial action to the satisfaction of ADB, without prejudice to any		
		other rights contained in this Loan Agreement, ADB may declare the relevant FI ineligible, either indefinitely or for a		
		stated period, to be considered as a provider of financial intermediary loans or any other financial instruments for		

No.	Schedule	Description	Notes	Туре
		future ADB projects.		
44	Schedule 5	In addition to these requirements, to deter corruption and increase transparency, the Borrower shall create a Project website within 5 months of the Effective Date, accessible by the general public, to disclose various information concerning the Project including general information about the Project, public procurements related to the Project, Project progress and contact details in English and Vietnamese languages. The website shall also provide a link to ADB's Integrity Unit (http://www.adb.org/Integrity/complaint.asp) for reporting to ADB any grievances or allegations of corrupt practices arising out of the Project and Project activities. For each contract, the website shall include information on, among others, the list of participating bidders, name of the winning bidder, basic details on bidding procedures adopted, amount of contract awarded, and the list of goods/services, including consulting services, procured. The Borrower shall cause the Project Executing Agency to permit any bidder to request an explanation as to why a bid was unsuccessful and either the Project Executing Agency shall respond within 20 working days. The website will be updated promptly and regularly after each award of contract, (ii) each submission of the semiannual Environmental Monitoring Report to ADB. In addition to the web-based disclosure, stakeholders, which include civil society and non-governmental organizations, shall be provided by the	Complied with	Others
45	Schedule 5	Borrower with detailed information on procurement on public notice boards in their respective areas.  The Borrower shall and shall ensure that the Project Executing Agency and each IA complies with: (i) ADB's policy relating to Enhancing the Asian Development Bank's Role in Combating Money Laundering and the Financing of Terrorism (2003); and (ii) applicable laws and regulations of the Borrower on combating money laundering and financing of terrorism and that Loan proceeds are not used, directly or indirectly, in money laundering or financing of terrorism.	Complied with	Others
46	Schedule 5	The Borrower shall ensure that each FI formulates and implements internal control procedures, including customer due diligence procedures, to prevent violation of paragraph 26 above.	Complied with	Others
47	Schedule 5	The Borrower shall and shall ensure that each FI promptly informs the Borrower and ADB if there is any violation or potential violation of paragraph 26 above. In the event that ADB informs an FI of its concern that there has been such an alleged violation, that FI shall: (i) cooperate in good faith with ADB and its representatives so that ADB can determine whether such a violation has occurred; (ii) respond promptly and in reasonable detail to any query from ADB; and (iii) furnish documentary support for such response upon ADB's request.	Complied with	Others