

Updated Indigenous Peoples Plan

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ABBREVIATIONS

ADB	–	Asian Development Bank
AP/AH	–	affected person / affected household
BP	–	biogas plant
CBO	–	Community Based Organization
CEMA	–	Committee of Ethnic Minorities Affairs
CME	–	Clean Mechanism Entity
CP	–	Community Participation
CPC	–	Commune People's Committee
CPMU	–	Central Project Management Unit
CPO	–	Central Project Office
CSAP	–	Climate Smart Agriculture Practices
CSB	–	Community Supervision Board
CSAWMP	–	climate-smart agriculture waste management practice
CWU	–	Commune Women's Union
DARD	–	Department of Agriculture and Rural Development
DMS	–	Detailed Measurement Survey
DOC	–	Department of Construction
DOF	–	Department of Finance
DOLISA	–	Department of Labour, Invalids and Social Assistance
DONRE	–	Department of Natural Resources and Environment
DPC	–	District People's Committee
EA	–	executing agency
EMA	–	External Monitoring Agency
EM	–	ethnic minority
EMDP	–	ethnic minorities development plan
EMP	–	ethnic minority people
FF	–	father land front
FI	–	financial intermediaries
FFM	–	fact finding mission
GAP	–	gender action plan
GHG	–	greenhouse gas
HH	–	Household
IPP	–	indigenous peoples plan
IRP	–	Income Restoration Programme
LBP	–	large biogas plant
LCASP	–	Low Carbon Agricultural Support Project
LURC	–	Land Use Rights Certificate

MARD	–	Ministry of Agriculture and Rural Development
MBP	–	medium biogas plant
M/F	–	Male/Female
M&E	–	monitoring and evaluation
MOC	–	Ministry of Construction
MOF	–	Ministry of Finance
MOLISA	–	Ministry of Labour, Invalids and Social Assistance
MONRE	–	Ministry of Natural Resources and Environment
NGO	–	non-governmental organization
NTFP	–	non-timber forest product
PBMS	–	Project Beneficiaries Monitoring System
PCEMA	–	Provincial Committee of Ethnic Minorities Affairs
PCF	–	People’s Credit Fund
PPC	–	Provincial People’s Committee
PPMU	–	Provincial Project Management Unit
PPTA	–	Project Preparation Technical Assistance
PRA	–	Participatory Rural Appraisal
SAH	–	seriously affected household
SBP	–	small biogas plant
SIA	–	social impact assessment
SLZ	–	Safe Livestock Zone
SPS	–	safeguard policy statement
TOR	–	terms of reference
USD	–	United States dollars

GLOSSARY

Affected person (AP)	Means any person or persons, household, firm, private or public institution that, on account of changes resulting from the Project, will have its (i) standard of living adversely affected; (ii) right, title or interest in any house, land (including residential, commercial, agricultural, forest, salt mining and/or grazing land), water resources or any other moveable or fixed assets acquired, possessed, restricted or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence or habitat adversely affected, with or without displacement. In the case of a household, the term AP includes all members residing under one roof and operating as a single economic unit, who are adversely affected by a project or any of its components.
Affected community	Village impacted by (a) land acquisition due to any project activity, whether anyone will be relocated or not; (b) receiving relocated households or (c) in the vicinity and likely to be socially or culturally impacted by the project in a negative manner.
Biogas value chains¹	Value chains on biogas include managing manures and other agri-

¹ **Value chains** are Interlinked value-adding activities of BPs that convert inputs into outputs which in turn, add to the bottom help create competitive advantage. A value chain typically consists of (1) inbound distribution or logistics, (2) manufacturing operations, (3) outbound distribution or logistics, (4) marketing and selling, and (5) after-sales service. These activities are supported by (6) purchasing or procurement, (7) research and development,

	wastes as key inputs; ensuring that its outputs: gas, electricity and bio-slurry are fully utilized to improve rural environment and income.
Broad community support:	Ascertain the consent of affected Indigenous Peoples communities to the project activities where Indigenous Peoples groups are deemed to be particularly vulnerable. When Project involves physical displacement of Ethnic Minorities,(EM) commercial development of cultural resources, commercial development of natural resources within the EM land.
Consent of Affected Indigenous Peoples Communities/ Ethnic Minority People	For the purpose of policy application, this refers to a collective expression by the affected Indigenous Peoples communities, through individuals and/or their recognized representatives, of broad community support for the project activities. Such broad community support may exist even if some individuals or groups object to the project activities.
Entitlement	Resettlement entitlements include compensation and assistance.
Ethnic Minority People (EMP)/ Indigenous People	<p>According to ADB definition, the term Indigenous Peoples or ethnic minority is used (interchangeable) in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees:</p> <ul style="list-style-type: none"> (i) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; (ii) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; (iii) customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and (iv) a distinct language, often different from the official language of the country or region. In Viet Nam, Indigenous People term refers to Ethnic Minority people
Livelihood	Capabilities, assets and activities required to maintain living standards and quality of life, including cash incomes and self-consumption.
Safeguard Policy Statement (SPS)	Policy of the Asian Development Bank for social and environmental safeguards dated June 2009
Plan	Set of principles, objectives, procedures and budget defined in advance to ensure sound and smooth operation of the project. Quantitative targets (land, persons) in the plan are foreseen targets. They will be adjusted as needed during the project implementation.
Vulnerable groups	Distinct groups of people who might suffer disproportionately or face the risk of being further marginalised by the effects of land and property recovery or other project impact. RP defines as vulnerable households (1) female headed households with

	dependents, (2) illiterate individuals, (3) households with disabled household heads, (4) households falling under the current Ministry of Labour, Invalids and Social Affairs (MOLISA) benchmark poverty line, (5) children and elderly households who are landless and with no other means of support, (6) landless households other than households with stable non-farm incomes; and (7) severely affected household.
Meaningful Consultation	A process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

NOTE

In this report, "\$" refers to US dollars.

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EXECUTIVE SUMMARY

1. Growth in agriculture and livestock production is seriously stressing the environment particularly through: (i) the discharge of untreated livestock waste which carries with it high levels of pathogens, pollutes water resources, and ultimately endangers the health of people and animals; (ii) greenhouse gas (GHG) emissions, including methane, for which agriculture is the largest national source of emissions;¹ and (iii) degradation of over 40% of arable land due to the heavy use of chemical inputs and other unsustainable agricultural practices. To meet the demand for safe food and a healthy environment, Viet Nam intends to progressively adopt Climate Smart Agriculture Practices (CSAP).²

2. The Project, Low Carbon Agricultural Support Project (LCASP), will reduce agricultural pollution by treating livestock wastes through the expanded use of biogas and bio-slurry processing technologies. The project's outcome³ will be an increased uptake of climate-smart agriculture waste management practices (CSAWMP), in which it will be supported by (i) expanded use of livestock waste management infrastructure; (ii) credit lines for biogas value chains; (iii) enhanced CSAWMP technology transfer; and (iv) effective project management.

3. The population covered by the project in the targeted area in 2015⁴ is approximately 13.8 million, of whom 15.57⁵ % are of Indigenous Peoples (in this document will be referred to as Ethnic Minorities, EM). The EMs in the Project area includes Khmer, Tay, Nung, Hmong, Cham, Bana, Kho Mu, Xin Mun, Lao, Hoa, Thai, Muong, Dao, etc.

4. The Project recognizes EM as social groups with identities that are often distinct from dominant groups in their national societies. They are frequently among the most marginalized and vulnerable segments of the population. Their economic, social, and legal status often restricts their ability to participate in and benefit from development. The strategies presented in this Ethnic Minority Development Plan (EMDP) is to encourage participation and contribution of EM based on EMs' unique social and cultural characteristics that may require customized approaches and interventions than when working with the Kinh, and that general design of the Project will provide opportunity for EM to participate in and/or benefit from the Project activities. In essence, EMDP will ensure that EM receive social and economic benefits in a culturally appropriate manner and inclusive in both gender and intergenerational terms.

5. The Government has a strong commitment to addressing poverty amongst Viet Nam's EMs, as evidenced by the large number of policies and programs targeting EM development including Decree 12/2010/ND-CP (approved by Prime Minister in 2010 and effective in 2011).

¹ Methane is a potent GHG (21 times more than CO₂), but compared to other hydrocarbon fuels, burning methane produces less carbon dioxide for each unit of heat released. In 2008, IFAD found: GHG arise from the following main sources: Agriculture (50%); Energy (25%); Forestry (19%); Industry (4%); and Waste (2%). GHG from Agriculture: rice cultivation (45%); livestock (35%); agriculture-soil (11%); and, post harvest field burning (9%).

² FAO 2009 defines CSAP as 'agriculture that sustainably increases productivity, resilience, reduces or removes GHGs emission and enhances achievement of national food security and development goals.' CSAWMP is considered in the context of the Project to be a component of CSAP.

³ ADB Concept Paper for LCASP, April 2012.

⁴ National Statistic 2015

⁵ <http://cema.gov.vn/ket-qua-dieu-tra-thuc-trang-kt-xh-53-dan-toc-thieu-so-nam-2015.htm>

6. This is also in harmony with Asian Development Bank (ADB)'s Safeguard Policy Statement, SPS (2009), particularly on Indigenous People (IP)⁶ Policy objective that is to design and implement projects in a way that fosters full respect for EM identity, dignity and human rights, livelihood systems, and cultural uniqueness as defined by the EM people themselves. It recognizes that EMs do not automatically benefit from development, which is often planned and implemented by those in the mainstream or dominant population in the countries in which they live. Special efforts are needed to engage EMs in the planning of development programs that will affect them directly or indirectly.

7. An EMDP was prepared in 2012 based on PPTA surveys, results of the social assessment, and direct consultations with EM communities including key agencies in DARD, Provincial Committee for Ethnic Minority Affairs (CEMA) and Women Unions. These consultations were undertaken during the Project's Fact Finding Mission in three of the 10 project provinces, namely, Soc Trang, Bac Giang and Son La provinces. These three sample provinces will be targeted for engagement with EM. During implementation, as three other provinces, namely Binh Dinh, Phu Tho and Soc Trang, also have EM people present and are beneficiaries of the project, the EMDP is therefore required to be updated to cover all six provinces.

8. This EMDP focus on facilitating opportunities for EM in the six EM provinces, so potential benefits for EM can be realized, and to ensure that the Project will enhance and continue the approach introduced by ongoing QSEAP. The anticipated positive effect of this Project on EM is that they will gain access to financial, technical and management support for biogas and its value chain improvement. More IPs will be served by disseminating and transferring knowledge and technologies in agriculture waste management. A target has been set where 5% of 65,000 units of SBPs will be secured for EM.

⁶ Vietnamese prefers to define indigenous people as ethnic minorities.

I. INTRODUCTION

A. Overview of the Project

1. The Project, Low Carbon Agricultural Support Project (LCASP), will reduce pollution generated by agriculture wastes, especially from livestock, by using Climate Smart Agricultural Waste Management Practices (CSAWMP). Biogas technologies will be used to process agricultural and rural household wastes into clean energy in 10 provinces of Viet Nam.¹ The knowledge base for CSAWMP will be developed and disseminated. The result will be a healthier environment and increased rural incomes in the targeted areas.² MARD has been designated as the Project Executing Agency (EA) in which it will delegate responsibility for overall project coordination to its Agriculture Projects Management Board (APMB).

2. The project's outcome³ will be an increased uptake of CSAWMP, for which it will be supported by (i) expanded use of livestock waste management infrastructure; (ii) credit lines for biogas value chains (iii) enhanced CSAWMP technology transfer; and (iv) effective project management.

3. Through project component 1: The livestock waste management infrastructure, the Project will provide resources for the construction of BPs and facilities to improve household and farm hygiene. Three size ranges of BPs will be constructed with targets of 65,000 SBPs, 40 MBPs and 2 LBPs. The Project's 10 target provinces are selected based upon the: (i) prevailing density of livestock, especially in area of safe livestock zones (SLZs); (ii) willingness of the provincial governments to support the project and provide counterpart funds; and (iii) coordination with similar initiatives.

4. Under component 2, the Project will provide credit lines through FIs to small scale farmers and medium and large livestock enterprises to facilitate access to medium- and long-term financing (up to ten years) for BVC infrastructure construction and improvement.

Project component 3: CSAWMP technology development transfer will improve the skill and knowledge of various stakeholders to use CSAWMP. This will result in a sound knowledge base upon which development decisions for managing agricultural waste can be made. The project will (i) disseminate established good CSAWMP practice and (ii) research those technical and management areas where good practice is not yet established.

5. Under the fourth project component, project management, the government will staff the project with skilled staff at the central and provincial levels. As needed, the Project will engage specialist consultants to supplement technical and management knowledge and skills. Coordination with relevant organizations will be a management priority. A comprehensive Project Benefit Monitoring System (PBMS) with sex-disaggregated data will be used to accurately monitor project progress.

B. Objectives of EMDP

¹ Target provinces are: Nam Dinh; Lao Cai; Binh Dinh; Ha Tinh; Soc Trang; Son La; Phu Tho; Ben Tre; Tien Giang; and Bac Giang.

² A Project Preparation Technical Assistance was carried out using resources from the on-going ADB Loan 2513-VIE: Quality Safety Enhancement for Agriculture Products and Biogas Development Project.

³ ADB Concept Paper for CSAWMP, April 2012.

6. This Project will work in the lands owned by the Project's beneficiaries in the 10 targeted Provinces and will involve about 65,000 households, and about 42 livestock farms (commercial enterprises). Among these, potentially indigenous people will participate in the project and will affect them positively. According to ADB's screening process, overall Project is categorized as B for Ethnic Minority (EM) where EMDP is required.

7. The anticipated positive effect of this Project on EM is that they will gain access to financial, technical and management support for biogas and its value chain improvement. More EMs will be served by disseminating and transferring knowledge and technologies in agriculture waste management.⁴

8. The overall objective of this EMDP is to (i) encourage participation and contribution of EM based on their unique social and cultural characteristics takes into account their development needs and aspirations; (iii) ensure that the benefits delivered are culturally appropriate; (iv) ensure that the EM are consulted on the project sub-components, and they can participate fully in decision-making, implementation and supervision; and (v) set out detailed and time-bound implementation schedules; budget and institutional arrangements, establishing the roles and responsibilities of different agencies for implementation, supervising and monitoring for all activities included in the EMDP.

9. This Ethnic Minority Development Plan (EMDP) is prepared and updated based on results of the social assessment and direct consultations with EM communities conducted in six provinces of Soc Trang, Bac Giang, Son La, Lao Cai, Phu Tho, and Binh Dinh provinces.

C. Impact of Project on Ethnic Groups

10. One of the key project investments in the construction of 36,000 small size biogas plants (SBPs) will accrue benefits for EMs as adoption of this waste treatment technology can bring forward benefits such as, reduction in expenditure on fuel-wood; construction and installation of biogas creates employment and additional income; use of biogas saving the use of traditional cooking fuels; and additional income through selling bio-slurry, and using biogas for domestic based income generating activities such as commercial cooking.

11. Further impact will be accrued on health as biogas reduces health risks (e.g. respiratory diseases, eye ailments, burning accidents) associated with indoor air pollution, it improves the sanitary condition of the farm yard and its immediate, surroundings, by disposing animal and human waste. Application of bio-slurry can improve agricultural production and food availability.

12. Through the Project's third component, in CSAWMP Technology Development Transfer, EM will have the opportunity to build practical knowledge in CSAWMP models and technology development where one of the applications such as the use bio-slurry as organic fertilizers can help improve crop and other agricultural productivity. For future expansion of biogas plant (BP) value chain models, where potential surplus of gas available, electricity from BP can be distributed to EMs.

13. EMs may also be presented with positive opportunities given the Project's future plan to construct a large number of biogas plants (BPs) spread over a wide and diverse geographic area, and the majority of the BPs has yet to be clearly defined as they are scattered around the 10 provinces.

⁴ Based on ADB's approved categorisation's form, signed and dated April 17, 2012.

14. Given their economic, social, and legal status which often reduce their ability to participate in and benefit from development, presents a risk of EMs to be excluded from the future economic opportunities and technical know-how in CSAWMP models/technology development transfer. The EMDP recognizes that these reasons make it difficult for EMs to participate in and benefit from biogas programs in the same way as Kinh do. As stated in section 1.2, customized effort is needed to secure EMs' participation in the Project.

II. LEGAL AND INSTITUTIONAL FRAMEWORK

A. National Legal and Policy Framework for Ethnic Minority People

15. The EM definition in Viet Nam is based on four criteria: (i) a language different from the national language; (ii) long traditional residence on, or relationship with, land; and long traditional social institutional system; (iii) a self-provided production system; and (iv) a distinct cultural identity, and self-identification as a distinct cultural group that is accepted by neighbouring ethnic groups.

16. In Viet Nam there are 54 ethnic groups, ⁵including the majority Kinh who represent 85.4% of the population⁶. Most of the EM groups live in the northern and central regions, and mostly in rural, mountainous areas. Although these EMs only represent 14.6% of the population, they account for nearly one third of the poor. In 12 of the 13 poorest provinces, they represent nearly half of poor households.

17. The Government has a strong commitment to addressing poverty amongst Viet Nam's EMs, as evidenced by the large number of policies and programs targeting EM development since 1992.

18. Instruction 525/TT of November 1993 provides an overall policy framework for the accelerated development of mountainous areas and areas of EMs. Its main provisions are: (i) the promotion of an economy based on consumer goods, instead of an economy of self-sufficiency; (ii) the development of the rural infrastructure, in particular the access roads to the villages and the supply of drinking water; (iii) the reinforcement of the existing education systems, the adaptation of the education and training programs to the local conditions and the encouragement of informal education efforts; and (iv) the study of the causes of the insufficient food supply and the identification of ways to resolve this problem in each province. Details of EMs related development programs are provided in the Social Impact Assessment, and the two most important are mentioned briefly below.

19. It is a requirement in Viet Nam that the adaptation of economic and social policies to each region and each group, should take into account the needs of EMs. The Socio-Economic Development Plan and Socio-Economic Development Strategy of Viet Nam specifically call for attention to EMs. Major programs targeting EMs include Program 135 (infrastructure in poor and remote areas) and Program 134 (eradication of poor quality houses). A national policy on education and health care for EM is in place. All legal documents are referred below as table 1.

⁵ <http://csdlf53dtts.ubdt.gov.vn/Files/phieuho/Bieu13b.pdf>

⁶ http://files.ubdt.gov.vn/ContentFolder/ubdt/source_files/2016/09/20/15415074_Bieu%204%20-%20So%20nguoi%20DTTS%20o%20vung%20dan%20toc_16-09-20.pdf

1. Consistency of National Legal Framework and ADB Safeguard Statement

20. According to the ADB's safeguard policy statement⁷, the EM term is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees:

- (i) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;
- (ii) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
- (iii) customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
- (iv) a distinct language, often different from the official language of the country or region.

21. The following are the National legal documents related to EM that should be followed for any development project in the country. **Table 1** presents the national legal documents relating to EMs in Viet Nam.

Table 1: National Legal Documents Relating to Ethnic Minorities

2018	Decision No. 474 / QĐ-UBND dated 2018 on the Ethnic Minority Policy Review Program for the period 2016-2020, policy orientations for the period 2021-2025 promulgated by the Minister-Chairman of the National Committee for Ethnic Minorities.
2017	Decision No. 1163 / QĐ-TTg of August 8, 2017 approving the project "Promote law dissemination and education and advocacy for ethnic minority and mountainous areas in 2017-2021 period
2016	Decision No. 2086 / QĐ-TTg dated October 31st, 2016 approving the project on supporting socio-economic development of very few ethnic minority people in the period of 2016-2025.
2016	Decision No. 2085 / QĐ-TTg dated 31 October 2016 of the Prime Minister on specific policies to support the socio-economic development of ethnic minority and mountainous areas in the period 2017-2020
2016	Decision No. 1722 / QĐ-TTg dated 02/09/2016 approving the National Targeted Program for Sustainable Poverty Reduction 2016-2020
2016	Decision No. 2085 / QĐ-TTg of October 31, 2016 approving the specific policy on support for socio-economic development of ethnic minority and mountainous areas in the 2017-2020 period
2016	Resolution No. 52 / NQ-CP dated 15/6/2016 of the Government on accelerating the development of human resources for ethnic minorities in the period 2016-2020, with orientation to 2030;
2013	Decision No. 2356 / QĐ-TTg on the Action Plan for Implementation of the Ethnic Minorities Strategy to 2020 issued by the Prime Minister
2011	Decree No. 05/2011/NĐ-CP on the EM works. This Decree prescribes the activities of works on Ethnic Minority to ensure and promote equality, solidarity and mutual assistance for mutual development, mutual respect and preserve the cultural identity of

⁷ ADB SPS June 2009, SR3 Appendix 3.

	peoples living together on the territory of the Socialist Republic of Viet Nam.
2011	Decision No. 1270 / QĐ-TTg dated July 27, 2011 of the Prime Minister approving the Scheme on "Conservation and Development of Vietnamese Ethnic Minorities up to 2020"
2011	Decision No. 05 / QĐ-TTg on approving the Ethnic Minorities Strategy up to 2020
2010	Decision No. 52/2010/QĐ-TTg of the Government on the legal support policy for increasing awareness and knowledge on the law of poor EM people in the poor districts for period 2011-2020.
2009	Decision No. 102/2009 / QĐ-TTg of the Prime Minister on direct support policy for poor households in disadvantaged areas
2008	Resolution No. 30a / 2008 / NQ-CP of the Government on the Program to support fast and sustainable poverty reduction in 61 poorest districts;
2007	Decision no. 05/2007/QĐ-UBND dated 06-September-2007 of the Ethnic Minorities Committee on its acceptance for three regions of ethnic minorities and mountainous areas based on development status
2007	Decision no. 06/2007/QĐ-UBND dated 12-January-2007 of the Ethnic Minorities Committee on the strategy of media for the program 135-phase 2.

Source: MARD, 2012 and <http://www.cema.gov.vn>

22. Ordinance of the Government on grassroots democracy and Safeguard Policy Statement of the ADB requires the borrower to engage in a process meaningful consultation and to begin early the project preparation with the EMs. Therefore, there is no significant gap between ADB SPS and government regulation for EMs.

B. Summary of Resolution 30A

23. The Government of Viet Nam initiated a program in poverty reduction, based on Resolution No.30a/2008/NQ-CP dated 27 December 2008 on rapid and sustainable poverty reduction. This Resolution targets 62 extremely poor districts, in mainly mountainous and international boundary areas, with a total population of 2.4 million persons, 90% of whom are of EMs. The poverty rate in these districts is on average 3.5 times higher than the national average. **Table 2** presents provinces and districts included in the program. Bac Giang, Lao Cai , Phu Tho and Son La are included in this program.

24. The Resolution calls for a 12-year accelerated development program to be based on District level comprehensive socio-economic development Master Plans. The program, to be executed by Ministry of Labor, Invalid and Social Affairs, sets specific interim targets: (i) By 2010 to reduce poverty by 40%; (ii) By 2015 to reach the average poverty rate of the whole province; and (iii) By the end of the program in 2020, to reach the average poverty rate of the whole regions.

Table 2: Decree 30A Districts of Northern Mountain Provinces

Province	No. of Districts	District
Hà Giang	6	Đông Văn, Mèo Vạc, Quán Bạ; Yên Minh, Xín Mần, Hoàng Su Phì
Cao Bằng	5	Thông Nông, Bảo Lâm, Hà Quảng, Bảo Lạc, Hạ Lang

Province	No. of Districts	District
Lào Cai	3	Si Ma Cai, Mường Khương, Bắc Hà
Yên Bái	2	Mù Cang Chải, Trạm Tấu
Phú Thọ	1	Tân Sơn
Bắc Kạn	2	Ba Bể, Pắc Nặm
Bắc Giang	1	Sơn Động
Sơn La	5	Mường La, Bắc Yên, Phù Yên, Quỳnh Nhai, Sốp Cộp
Lai Châu	5	Sìn Hồ, Mường Tè, Phong Thổ, Than Uyên, Tân Uyên
Điện Biên	4	Tủa Chùa, Mường Ảng, Mường Nhé, Điện Biên Đông

25. The 30A program is predicated on mobilizing substantial funding from three main sources: private sector; government; and international donors. Two main agencies are mandated on matters relating to EMs: (i) Ethnic Peoples' Council of the National Assembly, which is responsible for submitting proposals and plans for EM groups and controlling and monitoring the implementation of national policies and development programs targeted at EMs; and (ii) Committee for EMs Affairs (CEMA), which is responsible for proposing policies and supervising development programs for EMs.

C. ADB Policy on Indigenous People

1. ADB Safeguard Policy Statement 2009

26. ADB's "Safeguard Policy Statement 2009" (SPS) seeks to enhance the effectiveness of ADB's safeguard policies and to ensure that these policies remain relevant to changing client needs and to new business opportunities. The SPS affirms that environmental and social sustainability is a cornerstone of economic growth and poverty reduction in Asia and the Pacific. The goal of the SPS is to promote the sustainability of project outcomes by protecting the environment and people from projects' potential adverse impacts. The objectives of ADB's safeguards are to:

- avoid adverse impacts of projects on the environment and affected people, where possible;
- minimize, mitigate, and/or compensate for adverse project impacts on the environment and affected people when avoidance is not possible; and
- help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.

2. ADB Safeguard Requirement for Indigenous People

27. The Asian Development Bank (ADB) recognizes the EM rights to direct the course of their own development. EMs do not automatically benefit from development, which is often planned and implemented by those in the mainstream or dominant population in the countries in which they live. Special efforts are needed to engage EMs in the planning of development programs that affect them, in particular, development programs that are supposedly designed to meet their specific needs and aspirations. EMs are increasingly threatened as development programs infringe into areas that they traditionally own, occupy, use, or view as ancestral domain.

28. The objective of safeguard requirements for EMs is to design and implement projects in a way that fosters full respect for EMs' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the EM themselves so that they (i) receive culturally appropriate social and economic benefits, (ii) do not suffer adverse impacts as a result of projects, and (iii) can participate actively in projects that affect them.

29. The EM safeguards are triggered if a project directly or indirectly affects the dignity, human rights, livelihood systems, or culture of EMs or affects the territories or natural or cultural resources that EMs own, use, occupy, or claim as their ancestral domain.

D. Project Screening and Classification

30. All ADB projects are screened to determine whether or not they have potential impacts on EMs. Projects are categorized by the significance of their impacts on EMs. The significance is decided by scrutinizing the type, location, scale, nature, and magnitude of a project's potential impacts on EMs. The degree of impacts is determined by evaluating (i) the magnitude of the impact on EMs' customary rights of use and access to land and natural resources; socioeconomic status; cultural and communal integrity; health, education, livelihood systems, and social security status; or indigenous knowledge; and (ii) the vulnerability of the affected EMs.

31. As stated earlier, in section I.B, the Project is categorized as B for EM, as there will be no negative impact for EM in 10 targeted Provinces. In fact, they will be benefitted positively from CSAWMP technology development transfer and participation in SBP. A target has been set where 5% of 65,000 units of SBPs will be secured for EM.

IV. SOCIAL IMPACT ASSESSMENT

A. Characteristic of Affected Groups of Ethnic Minority

32. The population of the Project in the targeted area of 10 provinces is approximately 13.8 million, of whom 15.57% are of Indigenous Peoples (in this document will be referred to as Ethnic Minorities, EM). The EMs in the Project area include Khmer, Tay, Nung, Hmong, Cham, Bana, Kho Mu, Xinh Mun, Lao, Hoa (Chinese), Thai, Muong, Dao. Table 3 presents ethnic groups compositions in Viet Nam and Table 4 presents percentage of EM households among total households in project areas.

Table 3: Ethnic Minority in Viet Nam

Ethnic Groups	Ethno linguistic family	Population in Viet Nam (%)
Kinh	Viet-Muong	87
Thai	Tay-Thai	1.8
Muong	Viet-Muong	1.5
Dao	Mong-Dao	0.9
Others		8.8

Table 4: Livestock, Household and Ethnic Minority in the Project Area

		Livestock In Agriculture (%)	Households (HH)	Ethnic Minority (HH)s	Percent (%)
1	Nam Dinh	45	412,425	69	0.02
2	Lao Cai	35	90,173	65,981	73.17
3	Binh Dinh	na	265,184	6,386	2.41
4	Ha Tinh	45	280,000	194	0.07
5	Soc Trang	23	225,851	77,821	34.46
6	Son La	24	172,267	152,279	88.40
7	Phu Tho	40	265,965	41,463	15.59
8	Ben Tre	35	298,880	365	0.12
9	Tien Giang	24	347,923	143	0.04
10	Bac Giang	35	339,009	39,853	11.76
Possible inclusion at a later stage of project:					
11	Thai Binh	42	465,847	44	0.01
12	Hung Yen	na	253,456	18	0.01
13	Nghe An	50	582,431	80,044	13.74
14	Thanh Hoa	40	730,022	121,090	16.59
15	Dak Lak	23	269,038	93,250	34.66
16	Dong Nai	32	314,285	26,156	8.32
	Total	na	5,312,756	705,156	13.27

Source: MARD, 2012.

33. LCASP is intended to directly benefit EMs, and, a strategy has been developed to ensure that: (i) EMs are consulted and given opportunities to participate in the Project investments, to ensure that the designs and implementation methods are wanted and culturally appropriate; (ii) any adverse impacts on EMs are mitigated; and (iii) any constraints on EMs benefiting from the investments are reduced.

34. The following sections provide a picture of socio-economic profiles of the six provinces of Soc Trang, Bac Giang and Son La, Phu Tho, Binh Dinh, and Lao Cai on which the design of EMDP is based.

B. Socio-Economic Characteristics of the Ethnic Groups

35. Son La, Lao Cai, Bac Giang, Phu Tho, Binh Dinh, and Soc Trang provinces are six of 10 participating provinces under the Project. The assessment and subsequent set of strategies and activities which have been designed for these provinces may also be a template for other project provinces (with EM population) to adopt where appropriate.

36. The six provinces have notable representation of EM groups. One of their key income sources for these ethnic groups is through animal rising and as the number of pig, buffalo, cattle and chicken in these provinces are significant, they have a big potential to construct biogas plants (BPs). Summary information on the potential is given in **Table 5**.

Table 5. Profile of EM and Livestock in Six Provinces

Items	Son La Province		Bac Giang Province		Soc Trang Province		Phu Tho Province		Lao Cai Province		Binh Dinh Province	
	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount
Livestock Production In Agriculture	%	26	%	45,5	%	23	%	40	%	35	%	51
Households	HH	243,936	HH	412,204	HH	310,558	HH	265,965	HH	90,173	HH	265,184
Ethnic Minority	HH	195,395	HH	46,330	HH	91,228	HH	41,463	HH	65,981	HH	6,386
Ethnic Minority percentage	%	85,6	%	12,4	%	30,7	%	16	%	73	%	2
Livestock Population												
Pig	head	520,000	head	1.102.336	Head	266.974	Head	798,917	Head	514,060	Head	797,701
Buffalo	head	>168,000	head	71.433	Head	5.179	Head	66,952	Head	131,542	Head	21,539
Cattle	head	>190,000	head	138.896	Head	27.565	Head	123,044	Head	19,439	Head	266,031
Chicken	head	5,000,000	head	11.878.000	Head	4.769.513	Head	11,478,200	Head	3,322,000	Head	4,632,200
Biogas Plants												
SBP (up to 50M ³ size)	unit	2,500	unit	1.908	unit	132	unit		unit		unit	
MBP (51-<500 M ³ size)	unit	NA	unit	NA	unit	NA	unit		unit		unit	
LBP (Above 500 m ³ size)	unit	NA	-	-		1						

Source: MARD, 2012.

37. The following sections sum up their socio-economic profile, living conditions, income, poverty incidence, and other characteristics which make up a rationale for customizing support and effort of engagement with these provinces and others of project beneficiaries with EM population.

1. Socio-Economic Profile of Soc Trang Province

38. Soc Trang Province is located to the South of Hau River, 231 km from Ho Chi Minh City and 62 km from Can Tho City. The province has a total natural area of 3,311.8 km², accounting for 1% of the country's area and 8.3% of the total area of the Mekong River Delta. Soc Trang is bordered to the North and Northwest by Hau Giang Province, to the Southwest by Bac Lieu Province, to the Northeast by Tra Vinh Province, and to the East and Southeast by the East Sea.

According to the 2015 data, Soc Trang province's population was 1,310,700 people (651,418 men and 659,282 women), with a density of 396 people/km², which is 1.27 times the national average. The urban population in Soc Trang is 327,675 people, accounting for 25% of the provincial population while the rural population makes up 983,025 people, or 75%. The natural population growth rate in the province is 9.4‰. Population in working age (15-64 years old) was 69.94%; under 15 years old was 24.53%; and elder 65 years old occurred 5.53%.

39. There are three ethnic groups in the province, of these ethnic Vietnamese comprised 65.16%, followed by Khmer people with 28.92%, and Hoa with 5.88%. Kinh, Chinese and Khmer people are living together in residential areas in an integrated and harmonious manner. Khmer people have specific traditional culture, language and writing. Khmer people's culture is affected by Indian, Brahmanism and Buddhism culture. Pagodas are home of cultural and social activities for Khmer people. Thus, the pagoda institution is important and essential in their daily lives. Therefore, the province is characterized by many pagodas (89 Khmer pagodas and 47 Chinese (Hoa) pagodas), temples, cultural relics with specific ethnic features, especially Ok-Om-Bok festival including Ghe Ngo boat race which is selected as among 15 typical festivals of Vietnam, attracting tourists to the Kong River Delta.

A number of ethnic people have live there for many years while other or their parents have migrated recently from neighbouring provinces such as Vinh Chau, My Xuyen or Tran De to live there. Although each ethnic group has distinct cultural identity which could be recognised by traditional festivals or through important events such as their wedding or funeral and language, they do not live in separate communities but live integrated with other ethnic groups and share common cultural values, production activities and living environment. In terms of language, the Khmer people have preserved their language which is taught at the Khmer pagodas to pass on the language skills to the next generations but they use Vietnamese for social communication with other people. Outside their community, Khmer people use Vietnamese in all their daily activities such as buying and selling at the market and making use of bank and public services. Therefore, language is not an issue because the Khmer have large integrated into the Kinh community and are able to communicate in Vietnamese.

2. Socio-Economic Profile of Bac Giang Province

40. Bac Giang is located in the North-eastern region of Vietnam and is 50 km from Hanoi Capital. Since 2012, the province is included in the regional planning of Hanoi. In the recent years, Bac Giang has had a comprehensively economic development and becoming the second

largest economic centre of the Northern midland and mountainous region. The province is bordered to the East by Quang Ninh Province, to the North by Lang Son Province, to the West by Thai Nguyen and Ha Noi City, and to the South by Bac Ninh and Hai Duong provinces.

The total natural land area of Bac Giang Province is 3,823 km², accounting for 1.2% of the total area of the country. According to the census on 1 April 2016, Bac Giang province's population was 1,653,397 with a density of 424 people/km², 1.5 times the national average. In Bac Giang, 14.9% of the population are living in the urban area and 85.1% are living in the rural area. In terms of gender, the number of male population account for 49.92% of the total population whereas female population make up 50.08%. The number of people in the working age occupy about 62.15% of the province's population, in which skilled labours account for 26%. The poverty incidence in the province is 8.88%.

The main economic activities of Bac Giang people are cultivation, livestock husbandry and traditional handicrafts maintained in a number of trade villages. The economic structure is gradually shifting from agriculture-forestry-fishery sector to industry and services sectors, which is in line with the industrialization and modernization process of the province.

41. There are 21 ethnic groups in the province, including 20 ethnic minority groups with the total population of 200,538 people, accounting for about 12% of the total population. Of these, ethnic Vietnamese (Kinh people) comprised 88.1%, followed by Nùng people with 4.5%, Tày with 2.6%; Sán Chay people and Sán Diu people, both with 1.6%, Hoà 1.2% and Dao people 0.5%. The ethnic minorities are mainly living in 105 communes and towns of six mountainous districts of Bac Giang, namely Son Dong, Luc Ngan, Luc Nam, Yen The, Lang Giang, and Tan Yen.

42. A number of ethnic people have live there for many years while other or their parents have migrated recently from neighbouring provinces such as Lang Son or Thai Nguyen to live there. Although each ethnic group has distinct cultural identity which could be recognized by traditional festivals or through important events such as their wedding or funeral and language, they live together in villages with Kinh people and have Kinh's housing type and communicate using Vietnamese. They work in solidarity and always help each other in their life and in agricultural production. Some features of the main ethnic minority groups in Bac Giang province are presented below:

Nung people. The Nung are mainly dependent on wet rice cultivation together with upland rice and other seasonal crops including cassava, beans, etc. Livestock husbandry is quite developing among Nung people. Subsistence economy is still marked in the area, Nung women often go to the forest to collect vegetable and mushroom for their daily consumption.

Tay people. The Tay in Bac Giang have more than 41,000 people, which is the second largest ethnic minority group in the province. The Tay people have long-standing wet rice farming practices with application of irrigation measures (canal excavation, embankment, etc.). In addition to wet rice cultivation, they are also engaged in growing seasonal crops and fruit trees as well as livestock husbandry. Traditional handicrafts are also maintained with the most famous is brocade weaving with many beautiful and unique patterns. Market is also one of the most important economic activities to Tay people.

San Diu people. According to 2014 statistical data, San Diu population accounts for 28,000 people, mainly in Luc Ngan, Luc Nam, Lang Giang and Yen The. Cultivation is the main economic activities of San Diu. In addition, San Diu people in Bac Giang are also focusing on

developing large-scale livestock husbandry and poultry. Bee keeping is also a long-standing livelihood activity which brings high economic values to San Diu people in the area.

Chinese (Hoa) people. In Bac Giang, the Chinese people account for 19,000 people, living in Luc Ngan, Luc Nam and Son Dong as well as other districts and towns in the province. The Chinese villages are playing an important role in preserving the traditions of the Chinese people. The Chinese are engaged in different economic activities to diversify their income sources, including agriculture, small industry, workers, and businesses. In which, agricultural economy (cultivation and livestock husbandry) is still their primary source of income.

San Chi people. Cao Lan-San Chi group in Bac Giang has more than 25,000 people (2014 data) in four districts, namely Son Dong, Luc Ngan, Luc Nam, and Yen The. Similar to other ethnic groups living in the midland and low mountainous area of the North, San Chi people are among those that developed cultivation activities. Upland cultivation is the main and dominant farming system of the San Chi; however, they also soon adopted wet rice cultivation from other ethnic groups living in the lower areas. In addition, San Chi people have a number of traditional handicrafts such as weaving, knitting, and forging.

Dao people. There are more than 9,000 Dao people in Bac Giang Province, mainly in Son Dong, Luc Nam and Luc Ngan districts. The primacy income source of the Dao in Bac Giang is upland cultivation and a small part of Dao people are engaged in wet-rice cultivation. Other activities, including livestock husbandry, handicrafts, trading, gathering and hunting are secondary sources of incomes which are complementary to upland cultivation.

3. Socio-economic Profile of Son La Province

43. Son La is the mountainous province in the Northwest of Vietnam. The province is bordered to the North by Yen Bai and Lao Cai provinces, to the East by Hoa Binh and Phu Tho provinces, to the West by Lai Chau and Dien Bien provinces, and to the South by Thanh Hoa. Son La has a 250km borderline with Lao PDR and is about 320km from Hanoi. The total natural area of the province is 14,055 km², accounting for 4.27% of the total area of the country.

According to the census of 1 April 2015, Son La province's population was 1,195,107, with a density of 85 people/km², one-third of the national average. The number of people in the working age is 705,114 people, accounting for 59% of the total population. Agriculture and forestry is the main livelihood sources, which employ 592,296 people, or 84% of the total workforce. The population is unevenly distributed, mostly concentrated in rural areas at 86.67% and urban areas at 13.33%.

The province has nearly one million hectares of forests and forests land, which has had great role for human ecology, environment and watershed protection for Da River, for regulating water resources for Hoa Binh hydropower plant and Son La hydropower plant. Son La province has two plateaus as Moc Chau (1,050 m) and Na San (800m) which have typically nearby temperate climate with average temperature of 21°C and fertile soils for tea, coffee, fruit plants (plum, peach), silkworm breeding and silk weaving, dairy farming. It could develop mining industry, tea and agricultural products processing. Son La has Ban Flower Festival of the Thai people, Hin village, Yen Chau landscape, Tham Tet Toong cave and transportation system (National highways No. 6, No. 37, No. 43, No. 279 and No. 46), waterways (Da and Ma rivers), air-route Na San-Hanoi on small-scale and for tourism and service development.

44. There are 12 ethnic groups in the province, namely Thai, Kinh, Mong, Muong, Xinh Mun, Dao, Khang, La Ha, Lao, Tay, Hoa and Kho Mu. Among these ethnic groups, Thai people accounts for 54.01%, followed by Kinh with 16.29% whereas those of Mong and Muong are 14.88% and 7.65%, respectively. The rest proportion is of the other 8 ethnic groups with average percentage of around 1%.

Although each ethnic minority group has a distinct cultural identity which could be recognised by traditional festivals, kermises or through important events such as their wedding or funeral and dialect, they live together in villages with Thai and Kinh people, staying in traditional stilt houses made of wood and bamboo among houses built with bricks of Kinh people. Besides the uniqueness in cultures, there are also similarities between them. They work in solidarity and always help each other in their life and in agricultural production. Some features of the main ethnic minority groups in Bac Giang province are presented below:

Thai people. The Thai is the most numerous groups in the province. The social unit of the Thai revolves around the village. The Thai generally resides in areas between the forests and fields. Each village usually has its own designation for residential land, arable land, forest, rivers, and cattle grazing land. Social relations are prominently featured in the Thai village, beyond relatives and embrace the whole community. They have close affinities with all aspects of life, from production to the spiritual life and religious beliefs. The Thai is very well known for their experience in watering, soil filling, ditch digging; wet rice cultivation is their primary livelihood source, especially sticky rice. Thai people are also engaged in livestock husbandry, poultry, weaving and pottery in some areas. The most famous product of Thai people is brocade with unique patterns and bright colours.

Mong people. Mong language belongs to the Hmong-Dao group. The Hmong live mainly on slash-and-burn cultivation. They also grow rice and corn on terraced fields. Their principal food plants are corn, rice, and rye. Apart from these crops, they also grow medicinal plants and linen plants to supply fibres for cloth weaving.

Muong people. The Muong has long-standing wet rice cultivation practice. Wet rice is the main staple food. In addition, the secondary sources of livelihoods of Muong people are collection of non-timber forest products such as mushroom, cinnamon, honey, bamboo, etc. Their well-know handicrafts are weaving, knitting, and silk worming. Muong women have sophisticated weaving technique.

Xinh Mun people. Xinh Mun population is concentrated in Son La Province with more than 21,000 people, accounting for 91.5% of Xinh Mun population in Vietnam. Xinh Mun ethnic group live mainly on farming on upland fields, planting sticky rice and maize. The Xinh Mun is also engaged in animal husbandry. Gathering and hunting also have important contributions to their daily lives. In addition, their knitted products are well known as beautiful and durable, for which Xinh Mun people often exchange for clothing and iron tools with Thai and Lao people.

45. The total households of ethnic minorities in the whole province are 195,566 households (HHs) with 934,578 persons. The top four districts which has the most number of people from ethnic minorities living in are Thuan Chau (28,519 HHs), Mai Son (23,038 HHs), Song Ma (22,640 HHs) and Moc Chau (25,815 HHs).

4. Socioeconomic Profile of Phu Tho Province

49. Phu Tho is one of mountainous provinces in the North, lying at the head of a triangular formation of East-North region, the Red River Delta and West-North region (its geographical position as the centre of West-East-North sub-area). The province is bordered by Tuyen Quang and Yen Bai to the North, by Vinh Phuc and Hanoi to the East, by Son La to the West, and Hoa Binh to the South. Phu Tho province, due to its strategic location, is often called the "West Gate of Hanoi" and is included in the regional planning of Hanoi Capital. Phu Tho is 80 km far from Hanoi, 200 km far from Lao Cai and Thanh Thuy border gates.

The total natural area of Phu Tho is 3,532.95 km², accounting for 1.5% of the country's area. The total population of Phu Tho is 1.37 million people with the density of 388 persons/km² (2015 Statistical Yearbook). The labor workforce of Phu Tho account for 840,000 people, mainly young labors. The proportion of skilled labors is 58%, in which those with degrees and certificates make up 26.5%, according to the socioeconomic report of the first six months of 2017. The urban population of Phu Tho account for about 30% whereas those living in the rural and mountainous areas occupy 70% of the total population. The main income of the people is from agriculture, forest and handicrafts, mainly rice, other agricultural products and livestock. The average income is about VND 25 million/person/year.

There are more than 28 ethnic groups living in Phu Tho province in which Kinh accounted for the largest percentage with 85.89% of the total population, the remaining 27 ethnic minorities accounted for 14.11% of the provincial population. Among the ethnic minority groups, Muong people accounted for the largest with more than 195,925 people (or 13.62 of the total population), followed by Dao people (14,290 persons or nearly 0.92%), Cao Lan, San Chay, Tay, Mong, and Thai. The ethnic minorities in Phu Tho are concentrated in Thanh Son, Yen Lap, and Tan Son districts. The features of the main ethnic minority groups are presented below:

Muong people. The Muong settle in mountain where there are many land for production and have long-standing intensive cultivation of wet rice which is the staple food in the area. Similar to the Muong people in Son La Province, the secondary sources of livelihoods of Muong people are collection of non-timber forest products such as mushroom, cinnamon, honey, bamboo, etc. Their well-know handicrafts are weaving, knitting, and silk worming. Muong women have sophisticated weaving technique. The Muong have many festivals and holidays which bear different meanings, including going to the rice field ritual in April, washing rice leave in July-August, new rice festival.

Dao people. The Dao belong to the Hmong-Dao language group. Their ancestors migrated to Vietnam from southern China in the 18th and 19th centuries. There are three main types of houses built by Dao: level with the ground (typical of sedentary communities) or on stilts or part stilts and part built ground level (typical of upland communities). Traditional livelihood of upland Dao focused on swidden or shifting milpa type cultivation. Sedentary communities of valley areas cultivate crops, especially rice, maize along with other vegetables. Over the past decades and much associated with improvements in irrigation, Dao people have increasingly shifted to sedentary forms of cultivation and moved to lower laying valley areas. Animal husbandry and fish production are also typical farming practices. Handicrafts tend to be side-lines undertaken during slack periods of the annual farming cycles. Traditional society is composed of lineages and branches of lineages. Each lineage is headed by a chief ("Toc Truong") who played an important role in community life. Society is patriarchal and patrilocal. They have a rich tradition of folk arts and literature. The Dao have long used Chinese script for religious books, genealogical records, and to transcribe tales, stories and verse. Principal literature genres are ancient tales, humorous tales, fables, riddles and folk-songs.

Cao Lan people. Other name of the Cao Lan is San Chi, San Chay. The Cao Lan include two different language groups, one is closer with language of Tay and Nung people while the other is closer with Chinese. Both belong to Tay-Thai language group. Worshipping ancestor is the main belief of the Cao Lan. Besides, they follow Buddhism, Taoism, and Confucianism. The Cao Lan cultivates wet rice. Today, the Cao Lan life develops following trend close with Kinh and Tay people. Cao Lan people have many folk songs, stories, and dancing such as drum dance, bird dance, fish-catching dance, etc.

5. Socioeconomic Profile of Binh Dinh Province

Binh Dinh is located in the South Central Coast of Vietnam, about 652 km from Ho Chi Minh City. The province is bordered by Quang Ngai to the North, by the East Sea to the East, by Phu Yen Province to the South, and by Gia Lai Province to the West.

The total area of Binh Dinh is 6,850.6 km² with population of about 1,962,266 (2015) people. The population density is 286 persons/km². The average GDP growth in a period from 2011-2015 is about 15% and from 2016 to 2020 is forecasted about 16.5%. The average GDP per capita is about VND 40.1 million and the increasing rate of the population is about 0.4 to 0.6 % per year. Each year the poverty reduction is about 2% on an average.

According to the 2015 statistical data, of the total population of Binh Dinh, male population account for 48.7% while female population make up 51.3%. The rural population is 68.82% and the urban population is 31.18%. The population in the working age of the province account for 58.8% of the population.

Binh Dinh province has 33 communes, towns with EM community living concentrate as villages/hamlets community in 06 mountainous and midland districts: An Lao, Vinh Thanh, Van Canh, Hoai An, Tay Son and Phu Cat. EM population in mountainous area is about 9,500 households with 36,500 people. Currently, there are 27 EM, of which 03 ethnic groups account for 9,300 households, 35,700 household members including Cham, Bana and H're and some new immigrants of 200 households with 800 people. The characteristics of the main ethnic minority groups in Binh Dinh are presented below:

Ba Na people. Bana ethnic people have been long living in Truong Son-Tay Nguyen region, and have a very interesting and unique traditional culture. According to the statistics by 31 December, 2015, total population of Bana ethnic group in Binh Dinh province is 9,372 people, in which Bana people live mainly in Vinh Thanh, Van Canh and An Lao districts. The Bana speak a language in the Mon-Khmer family (South Asian language). The Bana live on agriculture, mainly shifting farming. Along with planting, each family raises cattle, poultry as buffalo, cow, goat, pig, chicken. Purchase is based on the principle of goods for goods, the value is determined by chicken, axes, rice backpack, pig or copper pot, gongs, buffalo and so on. The Bana has lived mainly on agricultural production and breeding. In addition, the local people cultivate by backward methods, on forest and hilly land which is hard to grow on; the production in some regions is spontaneous but not carried out under any concentrated production methods. Therefore, their life has encountered into difficulties.

Cham people. The Cham is defined as natives in the South Central Coast of Vietnam and has the oldest settlements in this region. The Cham people in Vietnam are a Malayo-Polynesian ethnic group. Cham is an ethnicity with many traditional business, textiles, pottery making, brick making, trade, shipbuilding, fishing, sculpture ... especially rice cultivation is early developed

and constantly improved concerning seed and irrigation. The Cham people live in the plains, with the tradition to cultivate rice. Rice cultivation techniques by means of seeds, fertilizers, irrigation are quite proficient. Their main crops are rice, corn and cotton. Cham people also trade fish, shrimps as well as weavings and other artistic products. Cham people's family has the matriarchal tradition. The Cham ancient music – folk song has affected Vietnamese's ancient music – folk song in Central such as Cylindrical drum, Nam ai music, Hue chantey etc. The Cham dance will be performed in the Bok Kate festival in the temples. They celebrate religious holidays surrounding their long-standing history; the celebrations are usually held at their historic temples. Most of the Cham people in the region practice Hinduism or some form of it. They are also highly influenced by traditional ancestor worship. They celebrate the month the Ramuwan (Ramadan) during which ancestors are called to return home for veneration.

H're people. The H're people are an ethnic group speaking a language in the Mon-Khmer family and having close ties to the Xo-Dang and Ba Na languages. In Binh Dinh Province, H're people are concentrated in An Lao District. The H're are atheists. The small-sized nuclear family unit is very common among the H're. They live in stilt houses and the village chief is considered to have high prestige and plays an important role in village life. H're people are mainly engaged in wet rice cultivation and farming activities. Weaving is also among their main income-generating activities. H're people often hold buffalo-stabbing ceremonies which are accompanied by verses and songs. The Ka choi and Ka leu are two very popular tunes. Their musical instruments include the Brook, Ching Ka la, Ling la (traversal flute), and Ta lia (longitudinal flute).

6. Socioeconomic Profile of Lao Cai Province

Lao Cai is a mountainous province in the Northwest region of Vietnam, bordering the province of Yunnan in China, and is 330 km from Hanoi. The province is bordered to the North by China, to the West by Lai Chau Province, to the East by Ha Giang Province, and to the South by Yen Bai Province. The total population in Lao Cai Province is 674,530 people (2016) with the population density of 106 persons/km².

The province has 25 ethnic groups, in which 24 ethnic minority groups account for 64.09% of the total population. The Mong people make up 22.21%, followed by Tay ethnic group (15.84%), Dao (14.05%), Giay (4.7%), Nung (4.4%), and other ethnic minority groups with smaller number (Phu La, San Chay, Ha Nhi, La Chi, etc.). The ethnic minority groups are distributed in all nine districts and city of Lao Cai Province.

Hmong people. The Hmong belong to the Hmong-Dao language group. The Hmong are part of the San Miao of South China. Their ancestors emigrated to northern Vietnam around the end of the 18th and early 19th centuries associated with the Hmong struggle against Chinese feudal lords. The Hmong house is often rudimentary in architecture, comprising three bays and two lean-tos. The altar to ancestors is located in the central bay. The lateral bays serve as kitchen and bedrooms. The Hmong family is patriarchal and patrilocal. The patrilineal nuclear family is the rule in society. In the past, the Hmong practiced shifting cultivation but have now adopted a sedentary lifestyle, often constructing hydraulic systems to develop irrigated terraced fields. The principal food crop grown by Hmong is corn, while rice takes second place. Besides irrigated fields, the Hmong also grow rice on terraces. In corn fields, the alternatively plant various leguminous species such as green beans and peas. The principal fibre plant is hemp. They also grow cotton and are good weavers. Traditionally the most wide-spread plant of the Hmong was poppy to produce opium which formed an important place in their economy. Peach, plum and apple are famous fruit species in Hmong areas but their sales are still limited due to poor

transportation. Poultry and cattle rearing is relatively well-developed. Most Hmong families have buffalos, oxen and horses and draught animals. Each family raises pigs and chicken. Forest products constitute an important income source and hunting is commonly practiced. Handicrafts are well developed: weaving; cloth dyeing with indigo; making of paper, agricultural implements and silver jewellery; leather tanning; basketry; and carpentry. The Hmong worship spirits of the house, door and cattle. Buddhism, Confucianism and Taoism have also left their mark on Hmong spiritual beliefs. Catholicism is also practiced in some areas such as Sapa in Lao Cai Province.

Tay people. The Tay belong to the Thai-Ka Dai language group. The Tay village typically has 40-50 houses built at the foot of a mountain or hill near a river or stream. The houses are on stilts with a two-flap or four-flap roof of palm leaves, tiles or thatch. Traditionally, the father decided all matters with the eldest son as designated successor. The greater part of the family inheritance is given to the eldest son. The latter's children are given accorded greater consideration than those of his younger brothers. The Tay are mainly wet-rice farmers. The techniques are well advanced and commonly include irrigation systems. Market gardening is a recent innovation, but traditionally the Tay have engaged in producing specialized crops such as anise, soya beans, and timber. Also grown are fruit trees (pear, apricot, peach, tangerine), indigo plant and chestnuts. Growing bamboo for use in construction and basketry is also common. Animal rearing is quite developed: poultry, pigs, oxen and buffalos along with fish-rearing in ponds. The culture of the Tay has been deeply influenced by that of the Kinh people due to their longstanding co-existence. Similar to the Kinh, they also had a Nom based script with a rich literary history. Like the Kinh, the Tay are influenced by Buddhism, Confucianism and Taoism.

Dao people. The Dao belong to the Hmong-Dao language group. Their ancestors migrated to Vietnam from southern China in the 18th and 19th centuries. There are three main types of houses built by Dao: level with the ground (typical of sedentary communities) or on stilts or part stilts and part built ground level (typical of upland communities). Traditional livelihood of upland Dao focused on swidden or shifting milpa type cultivation. Sedentary communities of valley areas cultivate crops, especially rice, maize along with other vegetables. Over the past decades and much associated with improvements in irrigation, Dao people have increasingly shifted to sedentary forms of cultivation and moved to lower lying valley areas. Animal husbandry and fish production are also typical farming practices. Handicrafts tend to be side-lines undertaken during slack periods of the annual farming cycles. Traditional society is composed of lineages and branches of lineages. Each lineage is headed by a chief ("Toc Truong") who played an important role in community life. Society is patriarchal and patrilocal. They have a rich tradition of folk arts and literature. The Dao have long used Chinese script for religious books, genealogical records, and to transcribe tales, stories and verse. Principal literature genres are ancient tales, humorous tales, fables, riddles and folk-songs.

Giay people. The Giay belong to the Tay-Thai language group. Ancestors of the Giay migrated from southern China about 200 years ago. They have many similarities with the Tay, Thai, Nung and Bo Y in terms of custom and language. The Giay generally live in stilted houses. The Giay are well versed in irrigated terrace rice farming. Besides rice growing, slash and burn cultivation supplies corn, potatoes, cassava, gourd and vegetables. Animal husbandry includes mainly pigs and chickens. Handicrafts are not well developed except for basketry as well as bamboo objects for family use. Traditionally, farming land was communal rather than individual and there is a strong practice of mutual assistance.

Nung people. The Nung are mainly dependent on wet rice cultivation together with upland rice and other seasonal crops including cassava, beans, etc. Livestock husbandry is quite developing among Nung people. Subsistence economy is still marked in the area, Nung women often go to the forest to collect vegetable and mushroom for their daily consumption.

C. Family Structure, Relations Between Ethnic Groups

46. There is a common thread with the family structure of ethnic minorities in the three sample project areas where it is now has significantly changed. There are few traditional families with three or four generations living together (extended family), comprising of some nuclear families living under one roof. Because of economic reason: now land is owned by the State and the State assigns land-use rights to family households. Therefore, each large family, if it splits into small or nuclear families has opportunities to receive more land than they can assemble as one large family. In addition, they also have opportunities to receive subsidy from the Government to repair or build their house. In addition, splitting into nuclear families facilitates the economic development of each family to be more active and autonomous compared with being dependent within a large family.

47. From the observations in the six provinces, the minor ethnic groups have good relations with Kinh groups. They reside intermingled and get on well together, learning each other about production experiences. In fact, there is no bar to marriage between ethnic groups and male and female of different ethnic groups intermarry. This reflects the increasing integration among ethnic groups in the area project. Although there is different customs and habits, Kinh and minority groups in the project area are living in harmony and without conflict due to culture difference. This situation is an advantage to promote learning and exchange among the people in the community on biogas construction, O&M, climate smart agriculture and waste management practice technology.

D. Living Conditions, Income and Poverty Incidence

48. Poverty is extremely high in the mountainous and ethnic minority districts. The per capita income of the EMs is lagging behind compared to the average per capita income nationwide. While the average per capita income of the EM groups is VND 1,161,000 per month, the average per capita income nationwide is VND 2,637,000 per month, nearly two times higher than the EM group. The per capita income levels also reflect the gap among the 53 ethnic minority groups where the lowest income group is less than VND 632,000 per month of those belonging to Mang, Kho Mu, Lo Lo, Chut, La Hu, O Du, Hmong, La Chi, Bru Van Kieu, Co Lao and Xinh Mun. On the contrary, the highest income group has the per capita income of VND 1,200,000 per month, which is nearly double the income of the groups listed above.

About one fourth of the EM households are poor or near poor households. While the poverty incidence of the country in 2015 is 7%, the poverty incidence of the EM group reaches 23.1%. Particularly, the groups with poverty rates above 70% are La Hu, Mang, and Chut. Others have the poverty rates of about 60% include O Du, Co, Kho Mu, and Xinh Mun. In addition, the groups, namely La Ha, Khang, Hmong, and Xo Dang have the poverty rates of more than 43%. The poverty picture of the EMs has been improved compared to before when a number of EM groups have reached higher development such as Khmer, Ede, Gia Rai, and Xtieng. The groups with middle-income level have the poverty incidence under 15%; particularly, Ngai, Chu Ru, and Hoa (Chinese) have the poverty rates under 6%.

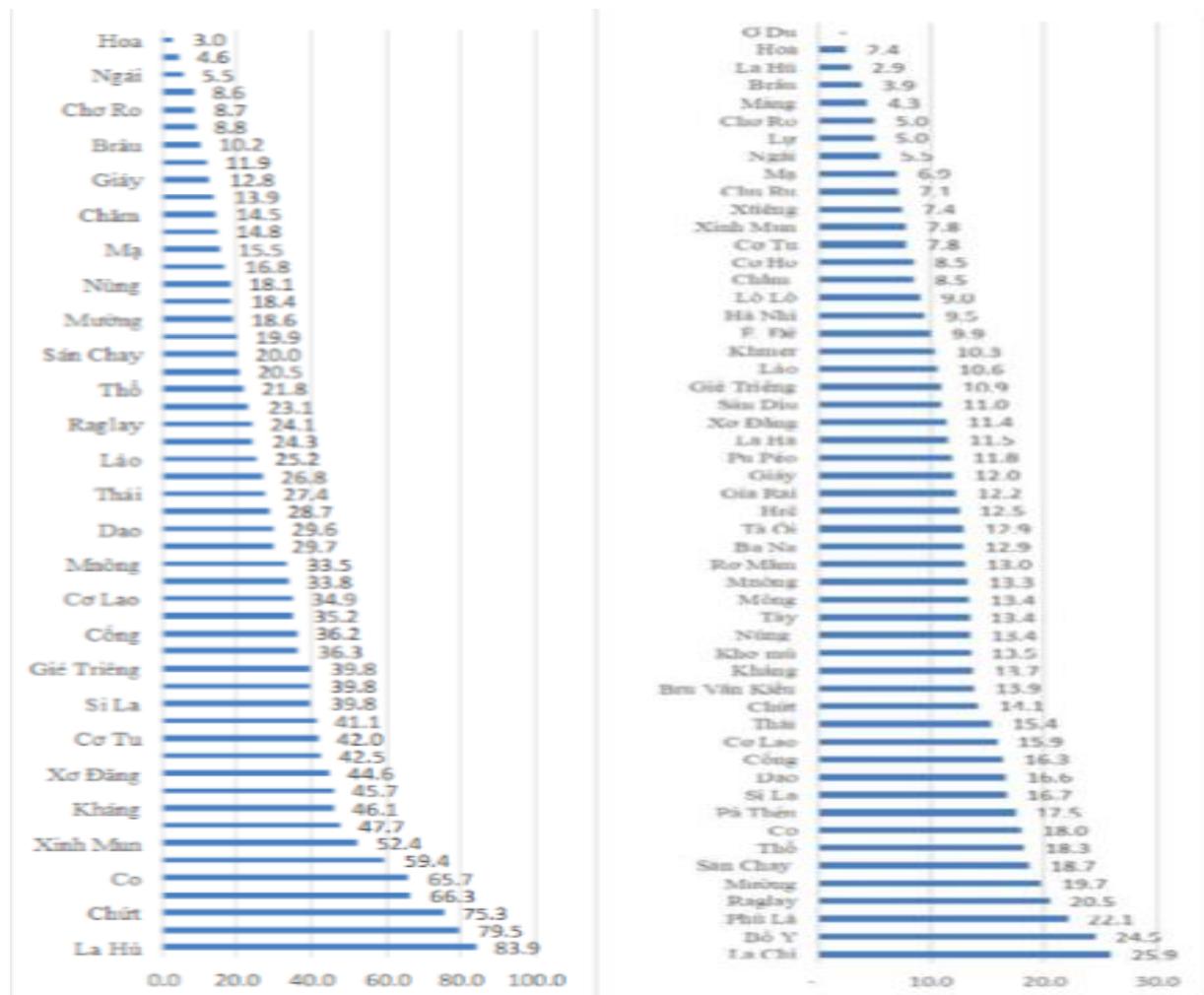


Figure 1. Poverty Rates and Near-Poverty Rates of Ethnic Minority Groups, 2015.

Source: Overview of Socioeconomic Status of 53 Ethnic Minority Groups, UNDP 2015.

According to Bac Giang provincial CEMA's representative, among 100 mountainous and ethnic minority communes, 32 communes have a poverty rate at 50% or above, much higher than the provincial average rate (9.4%).

49. In Bac Giang Province for example, in the Vuong Dong commune, of Yen The district, main income sources of 1178 HH (of each, 52% are from 9 ethnic minority groups) are from animal husbandry (60%). In addition, HHs also gain other income from agriculture farming (rice, peanuts, etc. 25%) and other income sources include from forestry and public officer's salary. The average income of household member is at 10,000,000 VND/year/head.

50. According to the commune's peoples committees of Vuong Dong commune, Yen The district of Bac Giang province the number of poor HHs according to the MOLISA poverty line is 28 % (of this, a majority is from one ethnic minority group or other) which is much higher than the average poverty rate of the province, being 9.4% and above that of the district poverty rate 11.94%.¹

¹ Bac Giang, DARD, 2012.

E. Status of Land Use, Health Education, Livelihood

51. Provision of land use right certificates (LURCs) on agricultural land in the project area is well advanced. Legally, land use rights have been allocated to each household, and households have received their titles according to Decree 64/1993/ND-CP of Government on allocation of agricultural land to farmers.

52. LURCs have been commonly issued to households for residential land, paddy land, gardening and/or forestry land. LURCs certificates are mostly registered under the name of the head of household which is in most cases is the husband. This is changing as now family make the effort to have certificates with both husband's and wife's name. This is a positive progress for women as it will allow women access to credit, which often requires LURCs as collateral. While most of the land was allocated to households by local authority over a decade ago. Some households managed to buy their land 15 years ago at very low price (5,5 million VND for 3,000M2 which may cost one as much as 150 million VND at the current price).

53. LURCs have been allocated with no time limit on residential land, for 50 years on agricultural land. The area of land allocated by household is very uneven between communes depending on their land fund.

F. Gender Issues

54. The main gender issues of ethnic minority groups living in the six provinces are similar to those among Kinh group but perhaps gender disparities are greater as ethnic minority groups' living in deeper hardship than those of the Kinh. Specifically, these issues are lower female participation in community activities and leadership compared to male, longer working hours for women, gender imbalance in involvement in the different sector.

55. While EM men and women share difficult tasks related to farming, women deliver the bulk of labour in the raising of livestock including feeding, cleaning of pens, waste management, marketing and trading. Women work an average of 9-11 hours per day since they also carry the weight for childcare and household duties including fuel collection, food preparation and cooking. On the other hand, men often work 2-3 hours less and specialise in heavy tasks such as land preparation, chemical spraying. Housework, collecting firewood is time consuming and real burden for women and daughter. According to a woman farmer² who was interviewed during the FFM's field trip, it usually takes as much as 3 hours per day for their daughter to collect fire wood to use daily family cooking demand. This has taken away their time to study and rest.

56. Women are also given good opportunity for promoting leadership as for men, but very few women play community and leadership roles in the society. In Bac Giang Province, women account for only 23.8% in the provincial People's Council's members, 25.9% in the district level People's Council and 21% in commune level People's council. In the provincial Committee for Ethnic Minority Affairs, women account for only 32% of the staff.

57. As mentioned in section III.E land use right certificates have been issued to households but not every certificate has names of both husband and wife in it. The process is going on in changing certificates to the one bearing both names of husband and wife. Women are often in

² Interview with Ms. Nguyen Thi Hoa, (41 year old, San Chay ethnic group) of Son Dong commune, Yen The district, Bac Giang, 19 May 2012.

charge of managing cash income within the family and make decisions themselves for daily expenditures. GAP will be also implemented when appropriate during the implementation of EMDP.

V. INFORMATION DISCLOSURE AND CONSULTATION

58. Three teams were mobilised during the FFM period to meet with the key EM stakeholders on the provincial and commune level. This was an opportunity to further share the project components of CSAWMP, explain the opportunities of engagement with the EM communities, to describe consultation and grievance redress mechanisms to be used during implementation and to solicit ideas from participants. The teams were also able to identify concerns and opportunities and how these will be considered in the project design. At least 5 consultations with various Stakeholders at each selected Provinces were conducted to ensure EM people's views on how to enhance positive impact and facilitate access of various project activities for EM and their communities. Earlier consultations have been conducted by PPTA team in the different project areas. During the baseline survey, information disclosure activities to the beneficiary households about the project have been organized in the ten project provinces. Ethnic composition of the project provinces recorded; outcomes, impact of LCASP have been shared among EMs.

59. This process of consultation was recorded accordingly and it served as reminder and further discussion with EMs and local governments, and it will also serve for reference in the future. Through this consultation, the stakeholders have suggested opportunities and ways to further facilitate the engagement of EMs and also recommended synergy with other project, especially QSEAP. Stakeholders appreciated the sharing of info related to the Project and understood time constraints at this stage to have a longer and detailed discussion. They agreed that before implementation of the Project further discussion for specific beneficiary groups need to be done.

60. Through the consultations, opinions were shared that the impact of biogas is widely recognized as being very positive. Awareness has been built through the experiences from the preceding projects in biogas delivered by SNV and currently QSEAP. EM farmers were able to describe the benefit related to the environment, health, energy and time saving, reduction of workload, cost saving for lighting and potential opportunities in income/employment.

61. Other inputs gathered from the consultation are that size of demand amongst HH BPs is healthy, especially in Son La Province where 21% out of 130,000HH are potential users. These needs are from Ethnic Thai, as the dominant group in Son La province (total number of HH is 680.000).

62. Concerns were conveyed that there is still lack of skills and technical training on O/M and constructions. Size of credit for SGB construction is reported as too small, there often delays in disbursement, and that repayment cycle is too short. There are interest in greater exposure to CSAWMP technology and utilization of biogas surplus. There were opinions from the Provincial DARD that financial institutions must have the ability to 'sell' the credit (or pre-paid carbon fund) by educating farmers that while the initial investment to adopt SGBs is large, however the long-term benefit is significant, as expenses for energy usage for gas /electricity will be reduced.

63. Suggestions were made from EM farmers to customize subsidy to cover 20-30% of BP construction cost, (5,000,000 VND/digestion). This suggestion is supported by provincial government as a solution to attract interest.

64. EM farmers were able to confirm that the new approach to waste treatment technology or potential does not pose any negative impact on their traditional farming system. Please see Annex 3 for summary of consultation with stakeholders.

VI. PROJECT APPROACH FOR ETHNIC MINORITY

65. This approach to encourage participation and contribution of EM is based on the recognition of EMs' unique social and cultural characteristics that may require customized approaches and interventions than when working with the Kinh group, and that general design of the Project may limit or prevent EM from participating in and/or benefiting in the Project activities.

66. It is also mindful of the mandates given through the ADB's approved: (1) Impact Categorization Form, Decision Category B; and (2) Initial Poverty and Social Analysis (IPSA) which identifies project main beneficiaries to be the livestock farmers and other stakeholders including ethnic groups participating in the livestock husbandry. These critical documents suggest that Project will take inclusive measure to pay specific attention to the poor segment of the population including female head of household, EM and other vulnerable people.

67. Meanwhile the Government of Viet Nam has taken a number of important steps to address poverty amongst Viet Nam's EMs, as evidenced by the large number of policies and programs targeting EM development (See Chapter II).

68. The design of this EMDP was based on the findings of the social assessment and results of consultations with key stakeholders in three sample provinces of Soc Trang, Bac Giang, Lao Cai, Binh Dinh, Phu Tho and Son La Province undertaken.

69. Small-scale livestock is the main source of income amongst the EM households in the sample provinces and the size of production is significant (See table 5). Meanwhile, the former and on-going biogas programs and enhanced CSAWMP technology transfer in Viet Nam cater more to the needs of the majority population.

70. While there is a need for a more rigorous survey and quantitative analysis on the actual size of demand for SBPs among EM households, through the process of direct consultations during FFM it is apparent that EMs are interested, and are willing to invest in biogas plants as a mean of waste treatment technology. They also expressed interest in learning other project activities related to CSAWMP skills and knowledge that can improve their income and living conditions.

71. However, participation rates in SBPs, at least among those who testify at the consultations meeting is low even though they own sufficient quantity of pigs or cows (average of 6 to 10 pigs and two buffaloes) to participate in the program, but they are lacking the purchasing power to invest in the biogas digester. While the innate requirements of SBPs do not consciously discriminate against ethnicity nor gender, in reality, EMs have different levels of access over knowledge and support in supervisions, monitoring, and financial facilities available through the former and existing biogas programs.

72. There is also a risk of EMs to be further excluded from the future economic opportunities and technical know-how in CSAWMP models/technology development transfer such as use of bio-slurry for organic fertilizers, livestock management, the uses of gas and electricity produced by the biogas plants, and the production of climate smart based food production. These reasons make it difficult for EMs to participate in and benefit from biogas (and all developmental) programs in the same way as Kinh do.

73. For a Project which aims to improve the environment and living conditions of rural communities, EM concerns and experiences need to be an integral dimension of the design, implementation, monitoring and evaluation of the Project. As a consequence, EMs (women and men) are more likely to benefit equally.

74. Securing participation and contribution of EM will also maximize the overall impact of the Project. Typically, EMs households in rural areas are the poorest. This Project through the initial investment in livestock waste management in SBPs can reduce expenditure on fuel wood; construction and installation of biogas facilities creates employment and additional income; biogas saves the use of traditional cooking fuels; there is additional income generated through selling bio-slurry, and using biogas provides further opportunities for domestic based income generating activities such as commercial cooking.

75. Several key issues facing EMs, which are yet to be addressed in the current biogas programs and other programs relating to agriculture/animal husbandry improvement technology, include:

- Lack of financing loan products that can support (and attract) potential biogas users among EMs. At the consultation meetings in three sample provinces, it was observed that, the size of the loan mechanism of loan should be customized to the unique economic, social and cultural conditions of EMs in the sample provinces.
- Project's implementation and O&M design does not have guidelines to reach out to EM. Therefore, there is limited budgetary allocation to EM's targeted activities including awareness and information, as well as sharing of technical knowledge in BPs. The existing network, knowledge and capability of the agricultural extension teams, community based organizations in WU, and FU must be engaged to reach to EM in biogas/livestock waste management related programs.
- Furthermore, current engagement of EM is skewed towards higher socio-economic grouping (as evidently they have more resources and access to information). This is not necessarily entirely negative as this grouping may also serve as a model for their communities.
- Available project data and analysis do not capture EM (and gender) based resource ownership, decision making and control & access, necessary for planning of resources required for the biogas programs (cattle, land, water).
- Lack of workshops and trainings specifically design to address capacity development needs of EM in animal husbandry, efficient livestock waste management and smart agricultural practices.
- Lack of public medium/forum for EM farmers to share and present concerns, discuss issues and topics pertaining to biogas, livestock waste management and CSAWMP.
- Limited access to information about the BP technology, its benefits and operation.

76. In order to secure engagement of EMs in the biogas value chains system³ the following critical approaches are proposed:

- **Participation of EM.** EM (men and women at an equal footing) will be included in the groups, at all levels, that discuss and contribute to the identification, selection, preparation and implementation of the Project activities particularly at the initial stage of biogas expansion effort. This can be achieved through quota schemes in the relevant institutions.
- **IEC and awareness programs for EM.** Recommendations gathered from consultations strongly suggested that further promotional/education efforts need to be made on biogas as well as CSAWMP models/technology development transfer. Practical measures must be implemented to ensure that EM get complete and correct information on biogas before purchase decisions are made. The most popular method was suggested in the
 - (1) Use of popular media to promote biogas and further emphasize with life demonstrations. All communications delivered with local language;
 - (2) Women's Union commune-level functionaries, village leaders and commune level agricultural extension teams must also be the key facilitator in the process of information distribution on biogas through meetings (village and individual household level), to reach out to EM and act as interface between the EM and the project;
 - (3) Experience from the Netherlands financed biogas project shows that masons play a very important role in promoting the benefits of biogas, and also provide technical guidance to farmers. So the project should use them as a communication group for the benefit and use of biogas technology.
- **Customize credit assistance,** lessons from Loan for Tea and Fruit development and the QSEAP support a credit line that will be managed by a number of partner financial intermediaries active in the rural and agriculture sector in Viet Nam. This will facilitate easier access to credit among potential biogas farm households, with particular emphasis on poor, women and other disadvantaged groups. Through consistent feedback during the consultation meetings is that current support is insufficient to meet the increasing cost in construction. Similar approach to QSEAP lending mechanism to eligible household beneficiaries in the specific Project areas should be followed by the Project; It is recommended to attract adoption among EMs. The size and mechanism of loan needs to be customized to the unique economic, social and cultural conditions of EMs.

At the consultation meetings, it was suggested to increase the credit support up to 150\$ per SBP and suggested to increase loan amount up to \$1000-1,500 (package includes improvement in sanitation facilities, including latrines) with longer pay-back duration and disbursement of loan instalment to be made prior to the construction work.

This requires further discussion and buy-in from the government, lending institution and ADB to follow earlier approach by QSEAP and other agencies working in the pilot areas.⁴

³ A value chain is a connected string of activities/steps, which takes biogas from the Project to the EM households.

⁴ Due to time constraints, detailed options in financial model for EM will be further discussed with the financial institutions.

- **Human resources and institutional support** to strengthen effort in:
 - (1) increasing awareness of EM's men and women on the benefits of bio-slurry use for crop production and applications such as vegetable farming, which can enhance the nutritional intake of families;
 - (2) engage EMs in producing and selling bio-slurry as commercial activity;
 - (3) Increase the awareness of EMs on the possibility to connect latrine to digester and hence improve sanitation of the household.

A forum or Commune Supervision Boards can be set up. The membership of which includes EM representatives in areas where a large portion of the population belongs to an EM. These will ensure that the discussions, queries as well as concerns from EM are properly taken into account during the implementation phase.

- **To dedicate budgets for EMs related approaches.** Accountability for EM outcomes to be built into the Project's M&E system. This needs to be complemented by organizational accountability for EM outcomes.
- **Institutional development & implementing partner structure, training and consensus building** to develop staff capacity that concerns of EMs are reflected in key project documents, as well as routine procedures such as M&E, TORs, staff appraisals etc.
- **Monitoring and Evaluation.** Use of EM and gender-disaggregated data baseline study & annual biogas user surveys and evaluations must examine, EM, gender & socio-economic aspects. Strengthening the quality and availability of EM-disaggregated data and analysis is essential to improve targeting and investments. Creating, monitoring, and evaluating effective EM-aware policies and programs depend on full and accurate data being available at different levels. Ensure synergy with pre-existing biogas program such as QSEAP.

77. The approaches for EM above are reflected below.

Table 6: Activities to be Supported by the Project⁵

No	Investment Activities	Targets by the end of the project	Stakeholders
1	Livestock Waste Management		
	<i>Biogas plant value chain management and sustainability</i>		
1.1	Organize to potentially share BP value chain benefits from BP owners to EMs	100% participating EM BP owners are shared on biogas value chain benefits through various communication activities.	CPMU, PPMUs in close coordination with relevant organizations, and EM
1.2	Construction of SBPs for EMs	By the end of the project, number of SBPs for participating EMs in sample provinces (Lao Cai, Son La, Phu Tho, Bac Giang, Binh Dinh, Soc Trang) counts for 5% of the	

⁵ During the preparation stage, the project had not complete its design. Therefore, a number of activities have been adjusted and/or removed during the implementation stage of the project, which have been discussed and agreed by both ADB and MARD during ADB's review missions. Hence, the activities proposed in the table 6 are most responsive to the current activities undertaken by LCASP.

No	Investment Activities	Targets by the end of the project	Stakeholders
		total SBPs.	groups
1.3	Monitor BP value chain management within EMs	100% SBPs for EMs are provided technical assistance and monitored by PPMUs and/or CPMU.	
1.4	Map EM statistic in sample provinces, their livelihoods and potential links to BP value chains.	By the end of the project, Map EM statistic in sample provinces (Lao Cai, Son La, Phu Tho, Bac Giang, Binh Dinh, Soc Trang), their livelihoods and potential links to BP value chains established and updated periodically.	
1.5	Assess resources and constraints for EMs to construct BPs	Assessment results of resources and constraints for EMs to construct BPs conducted and updated	
1.6	Train EMs to manage their livestock and wastes	100% SBP ethnic households trained on Biogas value chains sustainability including management of their livestock and wastes	
1.7	Assess surplus of gas, electricity, bio-slurry for EMs	Regular assessment conducted and updated in the Annual Monitoring Report on EMDP	
1.8	Manage gas, electricity and organic fertilizers for EMs	100% participant EMs are trained and guided on management of gas, electricity and organic fertilizers	
	Carbon market access		
1.9	Assess EM driven investments that may link carbon emission	100% SBPs for EMs are managed and assessed, supporting for carbon credit program	CPMU, National Biogas Program, MARD
1.10	Train EMs on CSAWMP linked to carbon markets	100% SBP ethnic households are trained on CSAWMP linked to carbon markets	
2	Facilitate EM access to FIs		
2.1	Facilitate EM access to FIs	10% households who have access to credit is EMs	PPMU in close coordination with FIs
2.2	Assess FIs which are suitable for EM to access the credit	Additional FIs are assessed to be suitable for providing the credit to EMs	
3	CSAWMP Technology Transfer		
3.1	Ensure EM areas included in agro-climatic mapping system	A map of EM areas included in agro-climatic mapping system established and updated periodically on a quarterly basis.	CPMU, PPMUs in close coordination with relevant organizations, and EM groups
3.2	Disseminate CSAWMP knowledge explored from E-libraries to improve EM skill and knowledge.	By the end of the project, an E-library system established to update and disseminate CSAWMP to improve EM skill and knowledge	
3.3	Ensure organic fertilizers are used in EM areas	100% participating EMs equipped a know-how of organic fertilizer production from bio-slurry and organic fertilizer use	
3.4	Disseminate CSAWMP skills and knowledge to EM, BP owners and other farmers in EM areas.	10% farmers trained on CSAWMP skills and knowledge to EM	
3.5	Encourage at least 30% of	At least 30% of CSAWMP promotion	

No	Investment Activities	Targets by the end of the project	Stakeholders
	CSAWMP promotion participants among EMs are women.	participants among EMs are women.	
3.6	Ensure that researchers and extension workers trained to properly monitor and document CSAWMP progress in EMs.	10% researchers and extension workers trained to properly monitor and document CSAWMP progress are EMs	
4	Project Management		
4.1	Establish indicators to target EMs in the province	Indicators updated	CPMU, PPMUs in close coordination with relevant organizations, and EM groups
4.2	Ensure social safeguard staff include support for EMs in their work plan	Social safeguard staff appointed and support for EMs in their work plan	
4.3	Ensure FIs to support EMs	All FIs support EMs to access to credit for CSAWMP.	

VII. BENEFICIAL AND MITIGATIVE MEASURES

78. This section specifies the measures to ensure that the EMs received social and economic benefits that are culturally appropriate, and gender responsive. EM will gain access to financial, technical and management supports for biogas and its value chains improvement. More EM will be served by disseminating and transferring knowledge and technologies in agricultural waste management. Based on consultation and survey, there will be no potential negative risks for EM in participating in this Project as there is no land acquisition and physical displacement of EM or commercial development of their cultural resources. EM instead will gain skills in better and save agricultural practices, employment and clean environment. Table 6 describes the measures to address issues and concerns of EM during consultation. The activities suggested by the villagers in the project areas with the number of affected households came from ethnic minority groups. This will be incorporated into project activities and will be further validated prior to implementation. QSEAP activities and approach towards vulnerable people will be enhanced and this is crucial as some EMs in the provinces is aware of the potential benefits of BP.

VIII. CAPACITY BUILDING

79. Measures will be put in place to strengthen the social, and technical capabilities of (a) Implementing government agency to carry out the EM engagement activities in the project area; and (b) EM organizations in the project area to enable them to represent the EMs more effectively.

80. The capacity building for government institutions and EM organizations who will be involved in the implementation of the EMDP will be further assessed carefully prior to project implementation to enable them to represent the interest of ethnic peoples more effectively. This assessment among others will include: PRA and community development; knowledge about livestock waste management, biogas plants and bio-slurry process; understanding of EM livelihoods and cultural practices; co-operation with other organizations in the areas.

81. Institutions to be involved in implementation of EMDP include DARD, PPMU, District CEMA, and Communal People Committees. These institutions have experience in EMDP, well understand the government policy but poor knowledge of ADB policy as well as its procedures. Training and capacity building plan for all those involved in EMDP implementation is due to take place early during implementation. Related training courses topic on community livelihood improvement program, appropriate technology for EM; participatory monitoring and community mobilization will be prioritized. Other information such as bio-slurry processed that will help EM areas to improve crop and other agricultural productivity; how to assess resources and constraints for EMs to construct BPs and participate in project related activities.

82. The existing network, knowledge and capability of the agricultural extension teams, community based organizations in WU, and FU must also be engaged to reach to EM in biogas/livestock waste management related programs.

IX. GRIEVANCE REDRESS AND MECHANISM

A. Consultation and Grievance Redress Mechanism

83. As mentioned earlier in Chapter IV, further consultation with EM, government and other stakeholders were conducted during the fact-finding mission of this Project. This method should continue during the implementation of this Project. During consultation EM shared their concerns and ideas in regards to livestock waste management, affordability of BP, their potential involvement in the BP value chain management, CSAWMP models/technology development transfer which include trainings and workshops in use of bio-slurry as organic fertilizers and other areas to help improve crop and other agricultural productivity.

84. A well-defined grievance redress and resolution mechanism is established to address EMs grievances and complaints regarding EMDP implementation in a timely and satisfactory manner.

B. Grievance Procedures

85. The number of complaints should be reduced as far as possible through effective participation and consultation with AEMs during the Project implementation. Every attempt should be made to establish a rapport between the affected communities and the implementing agencies through frequent interactions and transparency thereby maximizing the resolution of grievances at commune level. A three-stage procedure for redress of grievances is proposed based on practice in many Projects in Viet Nam and the new Decree on EM:

- (i). **Stage 1:** Complaints from AEMs on any project aspect lodged verbally or in written form with the commune (or ward), who will endeavor to resolve the matter with the PPMUs or CPMU, and commune level CEMA within 15 days of the complaint is received.
- (ii). **Stage 2:** If no resolution can be reached or if no response is received from the liaison officer within 15 days of registering the complaint, the AP can take their complaint to the District Peoples Committee (DPC) liaison officer and district level CEMA who will endeavor to resolve the matter with the DPC within 30 days of the complaint is received. The AP must lodge the complaint within 15 days of registering the original complaint and must produce documents that support his/her claim.

- (iii). **Stage 3:** If the AEM is not satisfied with the decision of the DPC or in the absence of any response, the AP can appeal to the Provincial People's Committee (PPC). The PPC, with advice from the related departments and agencies such as Provincial CEMA, DARD, Department of Finance (DOF), will provide a decision on the appeal within 30 days from the day it is received by the PPC.

86. A complaint or a case to the Court of Law may be done separately or independently from the Project level Grievance Redress mechanism filing process.

Households may lodge a complaint in writing directly to the Southeast Asia Department via Vietnam Resident Mission Office in Hanoi. If the household is still not satisfied with the Southeast Asia Department's response and only as a last resort, the affected household may access ADB's Accountability Mechanism: <https://www.adb.org/site/accountability-mechanism/main>.

X. INSTITUTIONAL ARRANGEMENT

87. The Central Project Management Unit (CPMU), representative of MARD is responsible for recruiting a safeguard specialist who is knowledgeable and experienced with ethnic minority issues and familiar with the requirements of the ADB on EM to support and monitor the process of EMDP implementation. CPMU participates in updating the EMDP if needed in collaboration with the People's Committees at various levels. MARD is the project owner through its CPMU, takes responsibility to ensure the entire project is implemented according to both government and ADB requirements. This includes the responsibility to ensure the EMDP are implemented in compliance with the commitments set out in it. CPMU will oversee the Project implementation of the EMDP and coordinate with province and the ADB on issues related to the EMDP.

88. Consultants are hired by CPMU to: (i) support the updating and implementation of the EMDP; (ii) conduct monitoring of the EMDP and GAP implementation. The EM specialist consultant should ensure a continuous focus on engagement of EM during the project detailed planning, review and implementation in each province.

89. PPMU, assigned by PPC and DARD, is responsible for planning, implementation and regular reporting of the EMDP. During implementation of EMDP, PPMU will ensure coordination with mass organization (WU, CEMA, FA) in the organization of activities related to EMDP. The PPC authorizes DARD to undertake the EMDP implementation in the Project. The PPMU will monitor and assist all activities in regard to the implementation of the EMDP.

90. Extension worker at district level will be specifically assigned to the task on reaching out to EM in accordance to EMDP.

XI. MONITORING, EVALUATION AND REPORTING

91. As designed, monitoring will be done through two monitoring mechanism: (i) ongoing internal monitoring process and outputs indicators by CPMU; and (ii) periodically external monitoring by an independent monitoring agency.

92. Internal monitoring and progress reporting will be the responsibility of the PPMUs and CPMU, and an independent monitoring organization or consultant, appointed by the CPMU in consultation with the implementation TA team, will provide the external monitoring. Nevertheless, during the project implementation, as the ethnic minority issues of the project are

not considered significant and the project only has positive impacts on EMs people and communities, the mobilization of external monitoring agency has been agreed to be cancelled during the Mid-term Review Mission by the EA and ADB. In addition, the PPMUs of all six provinces with EMs are aware of the requirement of encouraging the EMs to construct SPBs and participate in related training courses from the beginning of the project. EM people were involved in all project activities and information dissemination for EMs has been done adequately in all the provinces where the EM people live. Hence, the benefits of mobilization of the external monitoring agency will be minimal. At the local level, the Commune Biogas/CSAWMP Working Group will monitor on a regular basis, and coordinate the participatory monitoring by beneficiaries. The process of establishing participatory monitoring must begin with the identification of monitoring criteria by the beneficiaries themselves, against which they will judge the success or failure of the Project. Participatory Monitoring discussion including PRA will be conducted prior to finalizing the Monitoring and Evaluation (M&E) criteria.

93. The scope of the monitoring and evaluation program will include all components related to EMDP to provide feedback to management on their implementation and identifying problems and successes as early as possible to facilitate timely adjustment of implementation arrangements. The following indicators will be monitored periodically during EMDP implementation: (i) whether selected EM communities have commenced the implementation of EMDP as planned; (ii) timely provision of training and other activities that have been agreed; (iii) provision of information and training materials in a form appropriate and the language that understood by participating EM and their literacy level; (iv) complaints and grievances mechanism including used of local practices mechanism; (v) vocational training for alternative livelihoods related to biogas and its value chains management; and (vi) participating EM sex disaggregate database

94. The objectives of the monitoring and evaluation program are to (i) ensure that the EMs has been effectively engaged in the project activities; (ii) monitor whether the time lines are being met; (iii) assess if the EM development support programs are sufficient; (iv) identify problems or potential problems; and (v) identify methods of responding immediately to mitigate problems.

95. The internal monitoring is undertaken by the CPMU and PPMUs with the support of the Loan Implementation Consultant. Social safeguard monitoring reports on EMDP implementation will be submitted to CPMU and ADB for review and concurrence on a semi-annual basis. The social safeguard monitoring reports of the project shall be disclosed on ADB website.

XII. BUDGET AND FINANCING

96. The total base cost of EMDP is estimated at \$348,800 that covers specific measures and management costs and contingency. Budget source for EMDP should be taken from ADB loan and built in the Project Budget and Procurement Plan.

Table 7: Ethnic Minorities Development Plan Budget

No.	Items	Remarks	Unit	Unit cost	Total	Remark
1	Training and Workshop	Events	10	4,000	40,000	*
2	Knowledge products	Publication	4	7,500	30,000	**
3	Human resources					

	National Consultant	Person-months	24	2,500	60,000	
4	Monitoring/supervision (additional cost field workers)	person month	180	300	54,000	***
5	Exposure trips	person trip	60	1,800	108,000	***
6	Administration	Month	84	200	16,800	
7	Contingency				40,000	
	Total				348,800	

Notes:

* This includes workshop sensitization and annual planning that will be integrated into training and workshop in the Project Procurement Plan. Topic on EM/section will be available to fit with EM learning capacity

** This is for publications of the best practices for targeting EM related to all project activities including research/extension model, technology transfer, etc, CWAAMP. The research themselves will be funded through the regular activities in the Project detailed cost estimates and in the Procurement Plan.

*** This includes DSA, transportation, etc for the EM specialist; additional support for monitoring the PPMUs and extension workers who outreach EM groups; Exposure to best practices (in country or in region) to support EM. This also includes cost for supporting collecting data and reporting on EMDP implementation in the selected provinces.

Source: The Government and ADB Staff Estimates.

97. These specific funds will be allocated to knowledge product to ensure that specific handbook, and other knowledge materials and training/workshop activities can be available in the ethnic language. In addition, budget will be provided for human resources, monitoring/supervision and exposure trips dedicated to livestock waste management application through biogas and knowledge/consultation centre for CSAWMP related information centre/trainings. The activities to be covered by the budget will also include biogas/CSAWMP awareness workshop program for CPMU, PPMUs, subproject staff, District/Commune level CBOs and agricultural extension teams and visitation of EM to learn directly from other farmers in the participating communes in the project area. The breakdown of costs is provided in Table 7, above.

Table 8: Updated timetable for EMDP

No	Activities	2014				2015				2016				2017				2018				2019			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Livestock Waste Management																								
	<i>Biogas plant value chain management and sustainability</i>																								
1.1	Organize to potentially share BP value chain benefits from BP owners to EMs																								
1.2	Construction of SBPs for EMs																								
1.3	Monitor BP value chain management within EMs																								
1.4	Map EM statistic in sample provinces, their livelihoods and potential links to BP value chains.																								
1.5	Assess resources and constraints for EMs to construct BPs																								
1.6	Train EMs to manage their livestock and wastes																								
1.7	Assess surplus of gas, electricity, bio-slurry for EMs																								
1.8	Manage gas, electricity and organic fertilizers for EMs																								
	<i>Carbon market access</i>																								
1.9	Assess EM driven investments that may link carbon emission																								
1.1	Train EMs on CSAWMP linked to carbon markets																								
2	Facilitate EM access to FIs																								
2.1	Facilitate EM access to FIs																								
2.2	Assess FIs which are suitable for EM to access the credit																								
3	CSAWMP Technology Transfer																								
3.1	Ensure EM areas included in agro-climatic mapping system																								
3.2	Disseminate CSAWMP knowledge explored from E-libraries to improve EM skill and knowledge.																								
3.3	Ensure organic fertilizers are used in EM areas																								
3.4	Disseminate CSAWMP skills and knowledge to EM, BP owners and other farmers in EM areas.																								

ANNEX 1. DISTRICTS/COMMUNES WITH EM PEOPLE IN THREE SAMPLE PROVINCES

	Beneficial district	Natural area (Km2)	Total (person)	Number of HHs	Poverty Rate (%)	EMP	EM HHs	% of EMP to total population	Population density (people/ Km2)
		1	2	3	4	5		6	7
Son La Province									
1	Thuan Chau district	1538.73	154,552	31,251		145,127	28,519	93.90	97
2	Mai Son district	1432.47	145,362	32,441		111,018	23,038	76.37	97
3	Song Ma district	1646.16	133,210	26,901		116,498	22,640	87.45	78
4	Moc Chau district	2061.50	158,499	37,919		115,197	25,815	72.68	75
	Total	6678.86	591,623	128,512		487,840	100,012	82.60	
Bac Giang Province									
1	Bac Giang City	32.09	103,335	36,666	87	363	157	0.34	3,198.7
2	Luc Ngan	1,013.72	207,388	48,545	9,551	102,029	22,177	47.78	204.1
3	Luc Nam	597.15	200,339	54,044	7,799	29,334	6,953	14.23	334.6
4	Son Dong	845.77	69,110	16,983	5,097	31,917	7,184	45.07	81.1
5	Yen The	301.41	95,110	27,688	3,307	26,223	6,548	26.84	314.1
6	Hiep Hoa	201.12	213,358	53,490	3,672	222	148	0.1	1,052.3
7	Lang Giang	246.16	198,612	52,622	2,264	8,456	2,589	4.14	804.8
8	Tan Yen	204.42	159,018	45,998	2,434	1,236	374	0.76	775.5
9	Viet Yen	171.57	160,110	41,195	2,288	502	167	0.31	922.8
10	Yen Dung	214.44	161,157	34,973	2,594	203	33	0.12	750.3
	Total	3827.85	1,567,537	412,204	39,093	200,485	46,330	12.4	407.6
Soc Trang Province									
1	Soc Trang city	76.1	136,857	35,470	7.10	31,597	7,688	23,088	1,789
2	Chau Thanh district	236.3	101,379	23,753	21.11	48,219	11,184	47,563	429
3	Ke sach district	352.9	158,756	40,238	24.52	17,232	4,277	10,854	450
4	My Tu district	368.1	107,017	25,545	19.40	26,258	5,977	24,542	291
5	Cu Lao Dung district	261.4	63,319	15,622	16.35	4,016	970	6.34	242
6	Long Phu district	263.8	112,845	45,564	22.38	64,829	7,730	57.45	428
7	My Xuyen district	371.8	156,370	49,826	25.85	83,712	11,592	53.53	421
8	Nga Nam district	242.2	80,168	18,482	19.99	5,287	1,220	6.59	331
9	Thanh Tri district	287.6	86,093	19,963	20.87	29,361	6,738	34.10	299
10	Vinh Chau district	473.1	164,810	36,095	33.85	86,592	18,723	52.54	348
11	Tran De district	377.9	133,212	Na	28.48	na	15,129	na	353
	Total								
Phu Tho Province									
1	Viet Tri City	111.75	184,685	56,513	8.9	1,916	479	1.04	1,652.66

	Beneficial district	Natural area (Km2)	Total (person)	Number of HHs	Poverty Rate (%)	EMP	EM HHs	% of EMP to total population	Population density (people/ Km2)
2	Phu Tho Town	64.6	68,392	19,241	2.65	1,441	360	2.11	1,058.70
3	Yen Lap District	437	82,213	24,457	17.22	62,037	12,407	75.46	188.13
4	Thanh Son District	620.63	117,665	33,067	13.42	68,063	13,398	57.84	189.59
5	Thanh Thuy District	120.97	75,588	22,393	4.7	4,064	1,014	5.38	624.85
6	Tan Son District	691.18	76,035	20,636	22.12	62,217	12,295	81.83	110.01
7	Thanh Ba District	195.03	108,015	33,201	13.46	576	144	0.53	553.84
8	Phu Ninh District	156.37	94,094	29,281	3.38	645	161	0.69	601.74
9	Tam Nong District	155.97	75,469	22,781	6.36	511	127	0.68	483.87
10	Ha Hoa District	339.3	104,872	33,480	11.51	813	203	0.78	309.08
11	Lam Thao District	97.69	99,859	29,616	2.72	475	118	0.48	1,022.20
12	Cam Khe District	234.55	125,759	39,455	15.9	603	150	0.48	536.17
13	Doan Hung District	302	103,743	31,914	6.52	4,035	1,006	3.89	343.52
Binh Dinh Province									
1	Qui Nhon City	284.3	280,535	69,510	0.92	1,538	384	0.55	986.76
2	An Lao District	692	24,200	8,350	59	9,542	2,327	39.43	34.97
3	Hoai Nhon District	419.23	205,590	58,789	9.0	104	24	0.05	490.40
4	Hoai An District	744.1	84,437	26,298	16.65	3,047	725	3.61	113.48
5	Phu My District	548.9	169,304	46,358	10.02	35	8	0.02	308.44
6	Vinh Thanh District	700.8	27,978	9,467	56.06	8,345	1,642	29.83	39.92
7	Tay Son District	692.96	123,309	38,209	10.67	1,451	345	1.18	177.95
8	Phu Cat District	679	188,042	51,619	8.42	194	48	0.10	276.94
9	An Nhon District	292.6	178,424	50,253	5.11	281	68	0.16	609.79
10	Tuy Phuoc District	216.77	179,985	51,686	6.41	62	15	0.03	830.30
11	Van Canh District	797	24,661	8,394	54.49	9,952	1,959	40.36	30.94
Lao Cai Province									
1	Lao Cai City	229.67	98,363	28,852	2.08	22,166	4,430	22.53	428.28
2	Van Ban District	1445	79,220	19,204	28.25	66,512	13,092	83.96	54.82
3	Sa Pa District	683.29	53,549	12,315	44.9	43,734	8,609	81.67	78.37
4	Si Ma Cai District	234.54	31,323	6,955	42.46	29,193	5,508	93.20	133.55
5	Muong Khuong District	556.15	52,149	12,973	44.44	45,844	8,335	87.91	93.77
6	Bao Yen District	820	76,415	20,145	26.4	56,352	11,270	73.74	93.19
7	Bat Xat District	1,015	70,015	17,221	35.48	57,304	11,280	81.85	68.98
8	Bac Ha District	686	53,587	12,988	47.21	45,330	9,064	84.59	78.12
9	Bao Thang District	691.55	99,974	29,298	20.49	35,632	7,423	35.64	144.57

ANNEX 2: ETHNIC MINORITY'S MAIN SOURCES OF LIVELIHOOD

Main Livelihood Sources		Sales or Self-consumption, Location		
		Son La Province	Bac Giang Province	Soc Trang Province
Farming	Paddy rice	Largest output, little for selling, mainly for food	Self-consumption, sometime not enough and need to by extra	For sale, popular, main income and for food – consumption (Ngã Năm, Mỹ Tú, Thạnh Trị, Long Phu)
	Sugarcane	-	-	For sale, popular, main income and for food – consumption (Ngã Năm, Mỹ Tú, Thạnh Trị, Long Phu)
	Maize	All is sold for daily expenses, some are used for food and feeding livestock	-	-
	Cassava/Sweet potato	All is sold for daily expenses	-	-
	Vegetables, fruit trees	For daily food and sale	For daily food	For sale and food-consumption (My Xuyen, Ke sach)
	Onion Root	-	-	Popular, main income
	Peanuts	-	Self-consumption, with small amount of surplus sold in local market	-
	Tea	All is for sale	For sale, to local market or to traders who come to there areas	-
Livestock	Buffalo, cow	Popular, increasing, main income source	For pulling force	For pulling force
	Dairy cow	Milk production for sale.	-	Milk production for sale.
	Pig	Popular, increasing, for food and sale	For sale to traders to come to their house	For sale to traders to come to their house, very popular
	Chicken, poultry	Increasing, mainly for sale.	For sale	For sale and food consumption
	Goat	Decreasing, for selling	-	-
	Fish	Increasing in number and value for sale. Keeping in small and medium ponds	-	-

	Sugpo prawn	-	-	For sale as main income (Tran De, Vinh Chau, My Xuyen)
	Bach Dan	-	For sale, (long cycle – 5 year/ harvest) – 50 mio/1 ha of bach dan is profit from 5 year of growing these trees.	
	Keo	-	For sale (long cycle)	
	Duoc, Vet, Ban	-	-	Protective forest (Vinh Chau, CU Lao Dung)
	Tram	-	-	For sale (long cycle, 5 years) (My Tu, Chau Thanh
	Non-timber Forest Product (NTFP)	Bamboo shoots and various other products for family consumption and selling	-	-
Others	Fishing	For food and sale. Rather popular	-	-
	Service, grinding	Collection of, maize, cassava, sweet potato. Many rice and maize grinding machines in villages. Grocery services	-	-
	Alcohol brewing	Rather popular, for home use and sale	For self-consumption and sale to neighbours and local market.	For self-consumption and sale, popular. Using by – product to raise pigs

ANNEX 3: SUMMARY OF CONSULTATIONS

SON LA PROVINCE		
Friday, 18 May, 2012 Venue: DARD and Chieng Dong Commune.	Participants: 14 provincial representatives (12M/2F) from DARD, Livestock Department, WU, Agricultural Extension Dept, Committee of Ethnic Minority; 11 Thai livestock farmers (9M/2F) current and potential owners of biogas.	
TOPIC OF DISCUSSIONS	VIEWS / SUGGESTIONS GATHERED	REMARKS
Knowledge on Biogas, Perception of Benefits, Interest on BP), other suggestions	<p>Impact on biogas is recognised as very positive. Especially given the experiences from the preceding projects in biogas delivered by SNV and currently QSEAP where wider awareness on the benefit of clean energy have been acquired, evident in cleaner living environment, reduction of labour burden for women from collecting firewood.</p> <p>Communal BPs may be piloted as a possible solution for HH with smaller number of animals. Thai families tend to live in close living circle therefore they can potentially share cost of building, ownership, management and distribution of output. Further investigation has to be done however so this type of practice is viable socially and technically.</p> <p>Size of demand in HH BPs is healthy where 21% out of 130,000HH are potential users. These needs are from Ethnic Thai, as the dominant group in Son La province (total number of HH is 680.000) followed by Muong. While Thai live in close quarter and animals are contained in pens and proper housing, the Muong's preferred method of animal rising where buffaloes and pigs are roaming free. Ethnic Thai has the largest livestock activities, they live on the plains on the edges of the provincial city which is conducive for biogas construction. Muong on the other hands, while animals roam free, they also live on the mountain slopes, more difficult to apply the biogas technique.</p> <p>Suggestion from EM farmers is to customise subsidy to cover 20-30% of BP construction cost. This suggestion is supported by provincial government as a solution to attract interest.</p>	<p>Current use of biogas is average of 7-9m³, composite TK1, 9-30m³ own built. But >15m³ is recommended for more efficient use. Composite tank 40% of total cost to build 13-15million.</p> <p>QSEAP project provides Quynh Nhai district 5million in credit for BP construction.</p>

<p>Concerns about project design, Suggestions</p>	<p>Financial institutions must have the ability to 'sell' the credit (or pre-paid carbon fund) by educating farmers that while the initial investment is large, the long-term benefit is significant, as expenses for energy usage for gas/electricity will be reduced.</p> <p>Needs for credit may be limited among HH with medium size livestock as they are capable to finance the biogas construction.</p> <p>Building linkages to carbon emission is seen to be a distant ambition for Viet Nam.</p>	
<p>Level of capacity (needs assessment on trainings, information, knowledge on CSAWMP)</p>	<p>There is a need to strengthen educational effort on the long-term benefit of biogas through effective use of media, HH level demonstrations (proven to be very effective), commune level workshops and trainings. Villages prefer to learn from real examples / direct visitation to the other HH to learn the intricacies and benefit of biogas.</p> <p>IEC materials must be visually attractive (as it will appeal to women) and to use the specific EM language.</p> <p>Leverage the existing network, and human resources of the Agricultural Extension officers and the Women's Union to train EM to properly manage their livestock, latrine, water and sanitation.</p> <p>On-the-job trainings are more effective as skills are being built based on the real experience therefore allowing faster acquisition of technical work and knowledge in smart agricultural practices.</p> <p>Monitoring and evaluation system is already set up. Son La Province has fully trained provincial team consisting of five-persons (all men) while the district level has 15 (14 men and 1 woman) through preceding projects.</p>	

	Alternative use of surplus of bioslurry and gas from BPs needs to be further promoted and disseminate to EM.	
Current capacity	<p>User feedback surveys to be taken periodically by team with ability to speak the EM language. Skills and system have been established through the lessons from preceding projects.</p> <p>All BPs monitoring are undertaken by district level technicians (house visit 2-3 times in total before-during-and after BP construction.</p> <p>Target quota of 30% women as the agriculture extension officers in district and commune level is encouraged to secure women representation.</p> <p>Delegate responsibility to commune level government in BP and CSAWMP related activities in IEC, awareness raising, credit distribution/monitoring, O&M survey/needs assessment.</p>	
BAC GIANG PROVINCE		
Friday, 18 May, 2012 Venue:	Participants: 22 representatives (16 men and 6 women) from provincial DARD, WU, CEMA and EM farmers in; 10 Son Dong Commune and Dong Vuong Commune, at Yen The District.	
TOPIC OF DISCUSSIONS	VIEWS / SUGGESTIONS GATHERED	REMARKS
Knowledge about Biogas	Some community members have already exposed to BP, and convinced of the benefit	Mass organization (Women union, farmers association) and extension workers have knowledge, exposed and used BP
Perception of benefit	Belief and show benefit from installation of BP; able to describe benefit related to environmental pollution, health, energy saving, time saving, reduce workload, save money for lighting, potential income/employment; highlighted positive impact on women and children	Ethnic Tay, Kihn, Dao, Nung are eager to introduce the technology to their groups/families; they are convinced by exposure to the BP in their area and the support that have been given by SNV and QSAP

<p>Concerns about current approach that introduced by others</p>	<p>Technical: lack of skills and technical training on O/M and constructions</p> <p>Financial: credit is too small, delay in disbursement, short cycle for repayment</p> <p>Support: if not working well, do not know who to contact</p> <p>Continuity: worried about impact of fluctuated pig price that may lead to their lost</p> <p>Manure: need more exposure and technology for using biogas surplus</p> <p>How to help poorest family with less animal</p> <p>Conditions for participation should be adjusted to suit EM condition</p>	<p>Please see suggested approach</p> <p>Disbursement in several installations</p> <p>Duration for payment is 6 – 8 years</p> <p>Amount of loan higher (20 mil – 30 VND)</p> <p>CDM support increased (\$ 150) because of inflation and higher material transportation cost</p> <p>Incentive for technician</p> <p>Provide O/M training, monitoring and supervision at site (well and biogas plant – environmental sanitation)</p> <p>Higher amount of loan so they can buy additional animal</p> <p>Higher loan can facilitate income earning activities, can afford to pay earlier loan</p> <p>Training on animal husbandry technology and diseases</p>
<p>Impact on tradition practice and belief (farming system,</p>	<p>No impact and they are not concern</p>	<p>Discussion about the important of respecting EM belief, culture, rights and dignity</p>
<p>CSASP and safeguard discussion</p>	<p>Like the idea and expected to benefit poor farmers</p>	<p>Explanation about the project, important of EM involvement, voice and concerns; safeguard objective discussed</p>

Social analysis of Commune presented	9 EM; 1,178 HH (28%) are poor; 4,985 people (52% EM); poor commune in the district, poor people in the commune has access to other funds from bank for social policy; income 10 mil VND/head/year	
Interest in participating in BP	Very interested and the need is about 50% HH; cu	
Other suggestions	Eager to learn farming system, bio-slurry, fish feed, would like to be mason for employment; potential sharing with extended family member; women unions and farmer associations can support them	
Leadership	Supportive	
EM: Cao Lan, intermarried with Tay or Kihn, HH – 4-5 people, relative leave near by;		
Gender – reduce workload; risk of reducing of pig price, collateral	How if the pig diseases, how to secure BP? Support on access to market for better and predictable price Technical training on livestock raising, animal health and diseases control.	
Communal approach	They are not interested in, finding this is too complicated for organizing. However, one person in the group share that she has use biogas from her sister SBP which is about 100 m away from her. She does not have livestock to share the dung but just use the biogas. This is simple for her, as the biogas pipeline connecting from her sister's BP to her kitchen just costed her 25 USD/100 m.	
SOC TRANG PROVINCE		
Friday, 18 May, 2012 Venue: My Xuyen District, Dai Tam Commune, The Office of Commune's People Committee	Participants: 16 provincial and district representatives from DARD, Livestock Department, WU, Agricultural Extension Dept, Committee of Ethnic Minority; 40 Khmer EM livestock farmers at the Son Dong Commune and Son Ding Commune, at Yen The District.	
TOPIC OF DISCUSSIONS	VIEWS / SUGGESTIONS GATHERED	REMARKS

<p>Popularity / publication of information about project: objectives, scope, location...</p>	<p>Low awareness on biogas and application of bio-slurry. In general, Khmer people lack agricultural land and lack knowledge about animal production (epidemic, pandemic sometimes occur on the livestock Soc Trang).</p> <p>Very interested to learn more about agricultural extension, production techniques to be able to apply the advanced cultivation techniques, crop intensification and diversification of cropping patterns, increasing yield and productions of crops, livestock production, protecting livestock (avoiding epidemic, pandemic by bio safety as biogas in husbandry).</p>	
<p>Consultations on the impact of the project for households</p>	<p>It was acknowledged that the project implementation will provide solutions to the livestock waste issues.</p> <p>It will change the habit to manage / waste especially among EM. Previously disposed to the river.</p> <p>People are pleased that waste can be utilised as energy / fuel source to support domestic cooking and animal husbandry activities. Reduce cost for fuel. Assist in poverty reduction. Release burden on the environment. Reduce disease on animal and human. Improve living condition. Reduce air/water pollution; persevere the alternative source of energy oil, wood.</p>	
<p>Issues of gender, vulnerable group and ethnic minority</p>	<p>Women play very important domestic and animal raising role in HH. However all important decisions are made by men.</p>	
<p>The negative impacts of the project for ethnic minority (if have) and measures to reduce</p>	<p>While not too well verse on the operational aspect of BPs, it was assumed that it may be hard to manage and might catch fire, bad smell while cooking</p> <p>Initial investment is high, restricts poor people to access</p>	
<p>The issues of land acquisition and property on land and policies (If have)</p>	<p>None. Most families have unused space to be used for biogas digester</p>	

<p>Main/big constraints to people in earning incomes at the present time?</p>	<ul style="list-style-type: none"> - Low education level - Lack information - Lack knowledge about veterinary and husbandry - Lack of seasonal off-farm jobs - Limited suitable cultivation land for rice crops 	
<p>What are suggestions for solving problem (if there's any)?</p>	<ul style="list-style-type: none"> - To have support policy on the investment for the communes which highly ratio of EM to develop craft industry and other non-farm activities in the commune and employ people in the villages. 	
<p>Does the EMs apply the same production techniques as the Kinh people? Possible impact to traditional farming practice?</p>	<p>The leaving and production customs of the EMs are not much different from those of the Kinh people. EMs and Kinh are leaving in mixed with each other and applied the same cultivation techniques. The difference from Kinh people is that the EMs is with low education level, this is the main limitation to them in applying new technical production progress.</p> <p>Kinh and EMs are living together in the same communes (condition life is similar) or district and they raise animals with small scale (family scale) side by side. So, to protect the environment, limit climate change and protect livestock in husbandry, the project should apply the same production techniques as the Kinh people.</p>	<p>Suggestions:</p> <p>Supply us enough information about benefit of problem of biogas</p> <p>Training classes about the benefit of biogas, especial how to increase our interest from biogas, safety or not?</p> <p>Because we lack information about that, so don't dare invest in biogas.</p> <p>Support finance to build biogas (should be supported from 3 to 5 million vnd / SBP or 30 to 50% the cost of SBP, MBP or LBP because Animal husbandry has many problems as endemic, epidemic, pandemic and the price of products is low)</p> <p>Support finance to people who attend the training class to become biogas builder or maintainer.</p>
<p>Conclusion</p>	<p>100% supportive to the biogas</p>	

ANNEX 4. CHARACTERISTICS OF ETHNIC MINORITY GROUPS IN THE SAMPLE PROVINCES

Province	Ethnic Minority	Remarks
Soc Trang	<p>The Khmer (or The Khmer Krom and Mien, Cur, Cul, Cu Thở)</p> <ul style="list-style-type: none"> ▪ Khmer people comprise of 1.3% population of Viet Nam with 1,055,174 people (year 1999). ▪ In Mekong delta, the Khmer mainly lives in Tra Vinh, Soc Trang, An Giang, Hau Giang, Kien Giang and Can Tho Provinces. ▪ In Soc Trang, Khmer group is 30% of the total population with 399,463 people. ▪ The Khmer has popular first name as Lam, Thach, Danh, Son, Kim, Kien, ect. They speak Khmer language system and Vietnamese language as second language. ▪ The Khmer have managed to preserve their own language and writings. ▪ They usually live with the Kinh and Hoa in "soc" (villages), and "phum" or "ap" (hamlets). ▪ The houses are simply built with thatched or tiled roofs. Major Khmer festivals include "Chon Cho Nam Tho May" (New Year Festival), Buddha's Birthday, "Don Ta" (Forgive the Crimes of the Dead), and "Ooc Om Bok" (Moon Worship). ▪ The Khmer have a long tradition in wet rice cultivation. Animal husbandry, weaving, pottery and sugar making from the "Thot Not" Tree are other forms of economic activity. 	
Son La	<p>Thái group</p> <ul style="list-style-type: none"> ▪ The largest ethnic group in Son La Province. Thai group also lives in Lai Chau, Son La, Hoa Binh, Thanh Hoa and Nghe An provinces. ▪ Livestock is the main source of income of Thai household in the project area. ▪ The Thai group who were consulted for CSAWMP live on the plains, and keep their pigs and buffaloes in proper pens/housing. ▪ Matriarch family system, where the man staying with the wife's family. ▪ The Thai people have an open relationship with other ethnic communities. Although fresh water is brought to each household, Thai people still maintain the custom of river and spring bathing. ▪ Use firewood collected from near environments and up the hill for cooking. ▪ Thái people speak the original Tay language of Tay – Thai linguistic family. All Thai people in the project area can speak and write Vietnamese as official language. ▪ Thai people also cultivate rice, vegetables and other crops on terrain fields. In addition to raising cattle, and poultry, they also do handicrafts such as knitting, and some of them make pottery. 	<p>Mường group</p> <ul style="list-style-type: none"> ▪ Mường people are the second largest ethnic group in Son La Province. ▪ Mường people live and cultivate permanently in areas where productive land is available, close to roads and convenient to work and travel. ▪ In the project communes, they live together with Kinh people in villages and integrate their lifestyle and cultivation habits with the Kinh's. ▪ Mường people are tradition farmers and paddy rice is their main food crop

<p>Bac Giang</p>	<p>Nung group:</p> <ul style="list-style-type: none"> ▪ In Viet Nam, The Nung belongs with the Tay-Thai group of language, have about nine hundred fifty thousand people. ▪ The Nung have other name the: Xuong, Giang, Nung An, Nung Loi, KhenLai.etc. ▪ The Nung live mainly on rice and corn. They also grow fruit trees such stangerines and persimmons, and anise. ▪ Nung villages are often built on hillsides. <p>The Dao group:</p> <ul style="list-style-type: none"> ▪ In Viet Nam, The Dao belongs to the Mong-Dao group of languages and has about four hundred seventy thousand people. ▪ The Dao has essentially agriculture as means of survival. Today, many households have turned to forestry, wet rice growing or domestic animal breeding. ▪ Traditionally, their dwellings are either earthen houses or mixed (half earthen, half on stilts). ▪ Living nearby the Kinh has influenced their housing style. Many Dao people now live in brick house with architecture similar to those of the Kinh. ▪ The popular literature and arts of this ethnic groups are also extremely distinct. There are many unique legends, poems and songs, with themes ranging from nature to familial and social relationships which is expressed by "Two Sisters", "Catching Sprite't stories. <p>The San Chay (Cao Lan) group:</p> <ul style="list-style-type: none"> ▪ In Viet Nam, the San Chay belongs to the Tay-Thai group of languages and the group has a population of about 114,000 people. ▪ The San Chay have other name the: Cao Lan, San Chi, Man Cao Lan,.etc. The San Chay resides in valleys, mountains slope. ▪ Their main means of living are agriculture and animal breeding. ▪ The San Chay's peoples' houses were formerly built on stilts, but today modern changes can be seen in construction to look similar to that of the Kinh. ▪ For the San Chay, religious practises for death ceremonies are extremely important. 	<p>The Tay group:</p> <ul style="list-style-type: none"> ▪ In Viet Nam, The Tay belongs with the Tay-Thai group of languages have about one million five hundred thousand people, whose very crowded in ethnic minority. ▪ The Tay have other name the Tho and include of groups: Ngan, Phen, Thu Lao, Pa Di. ▪ The Tay language belongs to Tay language system. ▪ The Tay have a traditional agriculture with crop plants as paddy, maize, manioc ... and fruit and vegetables for season. ▪ The Tay village resides in mountains and along streams. The name of Tay village calls hills and mountains, fields, section of river. ▪ Every Tay village have fifteen, twenty houses. The large village divided many housing area. The Tay village used to have a house on stilts but now, young generation tend to live in brick house as Kinh family. In house differentiated between men room and women room. <p>The San Diu group:</p> <ul style="list-style-type: none"> ▪ The San Diu belongs to the Han group of languages. ▪ It has a population of about 130,000 people. ▪ The San Diu have other name the: San Deo, Trai, Trai Dat, Man Quan Coc.etc. ▪ The San Diu engages in rice farming practices. They can mainly be found living in villages and hamlets. ▪ Houses feature walls and roofs of hooked tiles. The San Diu practices the cult of ancestors, and also worship their own particular genies. There are many unique legends, poems and songs, with themes ranging from nature to familial and social relationships which is expressed "King Toad"story; dance: "stick dance". Musical instruments: "Tu Va" is made by buffalo's horns, Flute "sema" made by snail's shell. - The San Diu has gradually adopted the Kinh style of dress.
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ANNEX 5. STATUS OF HEALTH, EDUCATION, AND ACCESS TO INFRASTRUCTURE AND SERVICES

Province	Health	Education	Access to roads, electricity, market and media
Bac Giang	There is public health centre in each commune and a hospital in each district. Most EM women give birth at the commune health care centre.	Bac Giang province has achieved universal primary education. Living alongside with Kinh people in a same village and commune, most of ethnic people, including women in employment age are literate and can communicate in Vietnamese fluently. Except for the older generation between the age of 70 – 80 years old who have limited interaction with the Kinh, whom are mostly illiterate. This is an opportunity as the technical training can be organized for ethnic minority in Vietnamese language.	<p>Roads. There are main road linking provincial center to district and commune centers. Road quality are diverse from reasonable to poor quality (earthen road).</p> <p>Electricity. All households of the project communes are connected to the electricity from the national power grid.</p> <p>Media. Every commune in the project area is equipped with a loudspeaker system, which is used for daily dissemination of information. About 95 percent of households have TV in the affected communes. Many people have mobile phone, some households in Phung Giao commune can access to internet.</p> <p>Commune offices. Each commune has an office with telephone.</p> <p>Banking and Credit services. The Bank for agriculture provides loans to clients, including EM with collateral of LU Certificate. The Bank for Social Policy provide the poor households (with poor HHs Certificate) with credit with low interest rates (1.35% to 7.8%) depending on purpose of loan utility and loan amount is consider small for those who want to invest in scaling up their productivity.</p>
Soc Trang	Availability of health services in Soc Trang province have improved remarkably, as the number of hospitals and health stations have increase significantly, from 1846 to 2561 units in the period 2006-2009. In addition, the number as well as quality of health staff also increase. In the period 2006-2009, the number of doctors rose from 461 to 505 doctors, the number of physicians with intermediate certificates increased from 511 to 589 physicians, and the number of nurses rose by 20% in this period, from 447 to 534 nurses (Source: YSB of Soc Trang province, 2009).	The education sector in Soc Trang province has been paid attention to. Although the number of schools in the period 2006-2009 declined from 169 to 145 schools but the scope and quality have been strengthened considerably. The number of classes in this period increased from 1190 to 1339 classes, and the number of teachers also raised drastically from 906 to 1337 people. Besides, the number of pupils and students rose stably every year in the period 2006-2009 with increases from 30.4 to 35.9 thousand of pupils and from 1470 to 2989	<p>Soc Trang has An Nghiep industrial zone with a total area of 251 ha. This industrial zone borders the National highway 1A at the west, the by-pass of the National highway 60, 25 channel at the north, the 30/4 channel at the east, and is 4 km far from the provincial center.</p> <p>Since 2000, 100% rural communes in Soc Trang province has had access to medium voltage power lines. At residential centers, the grid provides sufficient electricity for industrial - small-scale industrial production demands. The percentage of households that use the grid</p>

Province	Health	Education	Access to roads, electricity, market and media
		<p>students respectively (Source: Yearly Statistic Book of Soc Trang province, 2009).</p>	<p>power increased rapidly from 64.6% in 2002 to 95.8% in 2008, and the percentage of households that use oil lamps reduced respectively from 31.1% to 3.8%. (Source: Viet Nam Household Living Standard Survey 2008).</p> <p>The water supply system in Soc Trang city has a capacity of approximately 20,000 m³/d. District towns have improved the water supply networks that meet productive and daily demands. In recent years, many water supply projects have been invested in remote communes of the province with tens of households as the project beneficiaries.</p> <p>Main transportation structure of Soc Trang province includes roads and waterways. Soc Trang has a quite convenient road system with some important roads passing through, such as the national highway 1A, and the national road 60. Waterways: Soc Trang has 72 km long coastline that borders the East sea and the downstream of the Hau river (the section from Can Tho province to Dinh An and Tran De seaports), and channels and canals that connect to the Hau river and create a favorable waterway network. Soc Trang has three large estuaries, namely Dinh An, Tran De, and My Thanh, that form a large catchment that is very convenient for transportation. The province also has Tran De port with a loading capacity of 240,000 tons of goods per year.</p> <p>Telecommunications - Soc Trang provincial post office has 146 branch post offices and agents, of which 44 branch post offices that meet required standards. Such services as sending flowers, EMS, and express services of money transfer are also exploited at post offices. The provincial communication systems have integrated into national and international networks. All communes have post offices and culture houses</p> <p>Banking and Credit services: The Bank for</p>

Province	Health	Education	Access to roads, electricity, market and media
			<p>agriculture provide loans to clients, including EM with collateral of LU Certificate. The Bank for Social Policy provide the poor households (with poor HHs Certificate) with credit with low interest rates (1.35% to 7.8%) depending on purpose of loan utility and loan amount is consider small for those who want to invest in scaling up their productivity.</p>
Son La	<p>Public health centres are present in each commune and there is a hospital in each district with a distance of about 20km-40km from communes the communes. There are also private health providers in some communes near Son La city, mainly for traditional healthcare. Most ethnic minority women give birth at the health care centre of the commune, some of Mong group at home. Villagers could access easily to the commune health care centre.</p>	<p>Adults completed grade 7. Rate of illiterate female from surveyed HHs is 54.9% higher than of male 45.1%.</p> <p>Percentage of female members finished high schools education is lower 42.7% compared to 57.3% of men and the rate of women finished technical/vocational training is also lower: 38.2% compared to 61.8% of men. Difficult economic conditions lead to high numbers of children dropping out of school.</p>	<p>Roads. The main roads linking project districts (Phu Yen, Moc Chau, Song Ma, Muong La, Sop Cop, Bac Yen, Thuan Chau, Phu Yen, Quynh Nhai) to Son La city and between communes of the districts are asphalted. Commune centres have asphalted roads except for Phuc Thinh commune. However, commune to village roads are in poor condition, often being only paths. The maximum distance from village to commune centre is about 5 - 10km, on average. Motorbike and bicycle are the main means of transportation within communes.</p> <p>Electricity. All households of the project communes have electricity from the national power grid. However, the power line to villages is poor quality and the power is often cut off.</p> <p>Market. Every commune has a market. There are shops run by local people in each village and in the commune centre with reasonable prices for consumption products due to favourable transportation condition.</p> <p>Media. Every commune in the project area is equipped with a loudspeaker system for daily dissemination of information. About 95 percent of households have TV in the affected communes. Many people have mobile phone, some households in Phung Giao commune can access to internet</p>

ANNEX 6: LIST OF PEOPLE CONSULTED

DATE	FORMAT OF MEETINGS	VENUE	NAME AND POSITION	TOTAL NUMBER OF PARTICIPANTS
18/05	Group Discussion	DARD, Son La Province	<ol style="list-style-type: none"> 1. Quang Thi Thong, Vice President, DARD; 2. Ha Dinh Nhie, Head of Livestock Department; 3. Hoang Thi Mai Phan, Director, Agricultural Dept, DARD; 4. Dang Minh Tuan, Home affairs Department; 5. Quang Thi Van, Representative, Provincial Women's Union; 6. Pham Anh Huu, Deputy Director, Agricultural Dept, DARD; 7. Le Thi Thuong, Staff, DARD 8. Lo Thanh Bang, coordinator of QSEAP 9. Cam Thi Nhung, manager of technical unit of Agricultural Dept, DARD; 10. Nguyen Dung Thien, deputy manager of Department ME 11. Nguyen Duy Moc, Chief of Secretary of DARD 12. Phan Tu Duong, Plan- Financial of DARD 13. Dang Minh Tuan, International Cooperation Unit of Home affair Department 14. Nguyen Thi Mai, Manage officer 	14 (6 men and 6 women)
	Group Discussion	Chieng Dong commune Yen Chau District , Son La Province	<ol style="list-style-type: none"> 1. Lo Van Kham, Chairman of People Committee, 2. Lo Thi Anh, Vice Chairman of People's Council; 3. Hoang Thi Thanh, Head of Women's Union; 4. Hoang Van Tuan, deputy Manager of Agricultural-forestry Unit of CPC; 5. Lo Van Chinh, Technician of Yen Chau District 6. Lo Van Phan, Farmer; 7. Quang Van No, Farmer 8. Dang Van Mo, Farmer 9. Quang Van Hong, Farmer 10. Hong Van Chau, Farmer 11. Hong Van So, Farmer 	11 (9 men and 2 women)
18/05	Group Discussion	In Son Dong Commune Yen The District, Bac Giang province	<ol style="list-style-type: none"> 1. Mr. Ninh Ngoc Thua, village party secretary, Son Dong commune, Yen the district, Bac Giang. (Cao Lan ethnic) 2. Ms. Nguyen Thi Hoa, (41 year old), Cao Lan ethnic group, Son Dong commune, Yen The district, Bac Giang and her husband, 3. Ms. Ninh Quang Duc (46 year old), Cao Lan ethnic group, Son Dong commune, Yen the district, Bac Giang. 	3 people (1 women and 1 men)
	Group Discussion	DARD of Bac Giang province	<ol style="list-style-type: none"> 1. Vu Dinh Phuong, Vice President, DARD; 2. Nguyen Thu Hien, Head of Livestock Department; 3. Nguyen Xuan Khiem, officer of Agricultural Dept, DARD; 4. Do Thi Le, Representative, Provincial Women's Union; 5. Hoang Van Du, officer of Agricultural Dept, DARD; 6. Nhu Van Nam, deputy manager of Department ME 	6 (4 men and 2 women)

DATE	FORMAT OF MEETINGS	VENUE	NAME AND POSITION	TOTAL NUMBER OF PARTICIPANTS
19/05	Group Discussion	Meeting Son Ding Commune, Yen The Commune, Bac Giang province	<ol style="list-style-type: none"> 1. Vi Van Minh, Chairman of People Committee, 2. Phan Van Hoang, Vice Chairman of People Committee 3. Ngoc Trung Huan, Vice Chairman of People's Council; 4. Tran Thi Nhung, Chairman of Women's Union 5. Nguyen Thi Ngan, Director Agricultural Officer; 6. Than Van Hien, Technician of Yen The province 7. Hoang Van Thu, Farmer 8. Trieu Chi Tho, Farmer 9. Luong Van Bac, Farmer 10. Do Thanh Duoc, Farmer 11. Luong Thi Ly, Farmer 12. Le Huu Dai, Farmer 13. Do Van Tuyen, Farmer 	13 (10 men and 3 women)
18/05	Group Discussion	DARD of Soc Trang Province	<ol style="list-style-type: none"> 1. Tran Van Tam Director of BD Livestock Department; 2. Ngo Quang The, Chairman of Commune People's Committee (CPC), Dai Tam commune 3. Ma Van Long, Deputy haed of My Xuyen District 4. Tran Quoc HungTran Thi Thanh Loan, Chairman, Farmer's Union My Xuyen District 5. Truong Thanh Son, Agricultural Extension Officer 6. Tran Thi Thanh Thuy, Chairman of Women Union My Xuyen District 7. Huynh Thi My Loan, officer of AED; 8. Ngo Minh Tri, officer of EM unit of the Commune Dai Tam 9. Ly Thi Quyen, Farmer 10. Thach Thi Dam Tuyet, Farmer 11. Huynh Thi Uyen, Farmer 12. Tran Thi Ly Eng, Farmer 13. Ly Thi Hai, Farmer 14. Thach Thai Nghiep, Farmer 15. Thach Min h Hieu, Farmer 16. Duong Nuong, Farmer 17. Ly Tong, Farmer 18. Lam Huong, Farmer 19. Tran Van Them, Farmer 20. Yeu Hung Hien, Farmer 21. Ly Sa Rich, Farmer 22. Ly Thanh Tam, Farmer 23. Danh Soc Khun, Farmer 24. Lma Minh Tuan, Farmer 25. Lam Can, Farmer 26. Son Ngoc Minh, Farmer 27. Lam Huu Hanh, Farmer 28. Lam Thi Tha, Farmer 29. Du Kim Quyen, Farmer <p>Plus 28 other stakeholders in Dai Tam Commune.</p>	29 (21 men and 8 women)

ANNEX 7: OUTLINE OF INDIGENOUS PEOPLES PLAN

1. This outline corresponds to Safeguard Requirements 3, EM, as described in ADB's updated Social Safeguard Statement 2009.

2. An EMDP is required for the participating province with impacts on EMs. Its level of detail and comprehensiveness is commensurate with the significance of potential impacts on EMs. The substantive aspects of this outline will guide the EMDP preparation, although not necessarily in the order shown.

EXECUTIVE SUMMARY OF THE EMDP

3. This section concisely describes the critical facts, significant findings, and recommended actions.

DESCRIPTION OF THE PROJECT

4. This section provides a general description of the project; discusses project components and activities that may bring impacts on EMs; and identify project area.

SOCIAL IMPACT ASSESSMENT

5. This section:

- (i) reviews the legal and institutional framework applicable to EM in project context.
- (ii) provides baseline information on the demographic, social, cultural, and political characteristics of the affected EM communities; the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources on which they depend.
- (iii) identifies key project stakeholders and elaborate a culturally appropriate and gender-sensitive process for meaningful consultation with EMs at each stage of project preparation and implementation, taking the review and baseline information into account.
- (iv) assesses, based on meaningful consultation with the affected EM communities, the potential adverse and positive effects of the project. Critical to the determination of potential adverse impacts is a gender-sensitive analysis of the relative vulnerability of, and risks to, the affected EMs given their particular circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to those available to other social groups in the communities, regions, or national societies in which they live.
- (v) includes a gender-sensitive assessment of the affected EMs perceptions about the project and its impact on their social, economic, and cultural status.
- (vi) identifies and recommends, based on meaningful consultation with the affected EMs, the measures necessary to avoid adverse effects or, if such measures are not possible, identifies measures to minimize, mitigate, and/or compensate for such effects and to ensure that the Ems receive culturally appropriate benefits under the Project.

INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

1. This section:

- (i) describes the information disclosure, consultation and participation process with the affected EMs that was carried out during project preparation;
- (ii) summarizes their comments on the results of the social impact assessment and identifies concerns raised during consultation and how these have been addressed in project design;
- (iii) in the case of project activities requiring broad community support, documents the process and outcome of consultations with affected EMs and any agreement resulting from such consultations for the project activities and safeguard measures addressing the impacts of such activities;
- (iv) describes consultation and participation mechanisms to be used during implementation to ensure EM participation during implementation; and
- (v) confirms disclosure of the draft and final EMDP in related provinces.

BENEFICIAL MEASURES

7. This section specifies the measures to ensure that the EMs receive social and economic benefits that are culturally appropriate, and gender responsive.

MITIGATING MEASURES

8. This section specifies the measures to avoid adverse impacts on EMs; and where the avoidance is impossible, specifies the measures to minimize, mitigate and compensate for identified unavoidable adverse impacts for each affected EM groups.

CAPACITY BUILDING

9. This section provides measures to strengthen the social, legal, and technical capabilities of (a) government institutions to address EM issues in the project area; and (b) EM organizations in the project area to enable them to represent the affected EMs more effectively.

GRIEVANCE REDRESS MECHANISM

10. This section describes the procedures to redress grievances by affected EMs. It also explains how the procedures are accessible to EMs and culturally appropriate and gender sensitive.

MONITORING, REPORTING AND EVALUATION

11. This section describes the mechanisms and benchmarks appropriate to the project for monitoring, and evaluating the implementation of the EMDP. It also specifies arrangements for participation of affected EM in the preparation and validation of monitoring, and evaluation reports.

INSTITUTIONAL ARRANGEMENT

12. This section describes institutional arrangement responsibilities and mechanisms for carrying out the various measures of the EMDP. It also describes the process of including relevant local organizations and NGOs in carrying out the measures of the EMDP.

BUDGET AND FINANCING