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INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL CREDIT

IN THE AMOUNT OF SDR 32.2 MILLION
(US\$ 44.68 MILLION EQUIVALENT)

TO THE

SOCIALIST REPUBLIC OF VIETNAM

FOR A

LIVESTOCK COMPETITIVENESS AND FOOD SAFETY PROJECT

JUNE 9, 2015

Agriculture Global Practice - GFADR
East Asia and Pacific Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective 31 MAY 2015)

Currency Unit	=	Vietnam Dong
VND 21,800	=	US\$1
US\$1.39	=	SDR 1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ACP	Agriculture Competitiveness Project
AF	Additional Financing
AFF	Agriculture, forestry and fishery
CPS	Country Partnership Strategy
DAH	Department of Animal Health (MARD)
DLP	Department of Livestock Production (MARD)
ESMF	Environmental and Social Management Framework
FO	Farmers Organization
GAHP	Good Animal Husbandry Practices
GDP	Gross Domestic Product
GoV	Government of Viet Nam
HH	Household
ILRI	International Livestock Research Institute
LIFSAP	Livestock Competitiveness and Food Safety Project
LPZ	Livestock Production Zone
MARD	Ministry of Agriculture and Rural Development
MPI	Minister of Planning and Investment
MT	Metric Tons
MIS	Monitoring and Information System
PCU	Project Coordination Unit
PDO	Project Development Objective
PP	Procurement Plan
PPMU	Provincial Project Management Units
PVS	Performance of Veterinary Services (OIE tool)
OIE	World Organization for Animal Health
VDIC	Vietnam Development Information Center
WB	World Bank

Vice President:		Axel van Trotsenburg
Country Director:		Victoria Kwakwa, EACVF
Senior Global Practice Director:		Juergen Voegele
Global Practice Director:		Ethel Sennhauser
Practice Manager:		Nathan Belete
Task Team Leader:		Son Thanh Vo

VIETNAM
ADDITIONAL FINANCING TO LIVESTOCK COMPETITIVENESS AND FOOD
SAFETY PROJECT

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ADDITIONAL FINANCING DATA SHEET

Vietnam

Additional Financing to Livestock Competitiveness and Food Safety Project (P151946)

EAST ASIA AND PACIFIC

GFADR

Basic Information – Parent									
Parent Project ID:	P090723	Original EA Category:	B - Partial Assessment						
Current Closing Date:	31-Dec-2015								
Basic Information – Additional Financing (AF)									
Project ID:	P151946	Additional Financing Type (from AUS):	Scale Up						
Regional Vice President:	Axel van Trotsenburg	Proposed EA Category:	B - Partial Assessment						
Country Director:	Victoria Kwakwa	Expected Effectiveness Date:	25 – Dec - 2015						
Senior Global Practice Director:	Juergen Voegele	Expected Closing Date:	December 31, 2018						
Global Practice Director:	Ethel Sennhauser								
Practice Manager/Manager:	Nathan M. Belete	Report No:	PAD1163						
Team Leader:	Son Thanh Vo								
Borrower									
Recipient: Socialist Republic of Viet Nam Responsible Agency: Ministry of Agriculture and Rural Development/Agriculture Project Management Board Contact Person: <i>Mr. Ton That Son Phong</i> Email: lifsap@fpt.vn									
Project Financing Data–Parent (Vietnam Livestock Competitiveness and Food Safety-P090723)									
Key Dates									
Project	Ln/Cr/TF	Status	Approval Date	Signing Date	Effectiveness Date	Original Closing Date	Revised Closing Date		
P090723	IDA-46490	Effective	22-Sep-2009	10-Dec-2009	10-Mar-2010	31-Dec-2015	31-Dec-2015		
Disbursements									
Project	Ln/Cr/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P090723	IDA-46490	Effective	XDR	42.10	42.10	0.00	36.3	5.8	86.3
Project Financing Data –Additional Financing Additional Financing to Livestock									

Competitiveness and Food Safety Project (P151946)			
<input type="checkbox"/>	Loan	<input type="checkbox"/>	Grant
<input checked="" type="checkbox"/>	Credit	<input type="checkbox"/>	Guarantee
<input type="checkbox"/>		<input type="checkbox"/>	IDA Grant
<input type="checkbox"/>		<input type="checkbox"/>	Other
Total Project Cost:	54.68	Total Bank Financing:	44.68
Financing Gap:	0.00		
Financing Source – Additional Financing (AF)			Amount
BORROWER/RECIPIENT			10.00
International Development Association (IDA)			44.68
Total			54.68
Policy Waivers			
Does the project depart from the CAS in content or in other significant respects?			No
Explanation			
Does the project require any policy waiver(s)?			No
Explanation			
Team Composition			
Bank Staff			
Name	Title	Specialization	Unit
Yuvan A. Beejadhur	International Affairs Officer	Partnerships	GFADR
Binh Thang Cao	Sr Agricultural Spec.		GFADR
Tam Thi Do	Program Assistant	Team Assistant	EACVF
Nina Masako Eejima	Senior Counsel	Country Lawyer	EACVF
Ijeoma Emenanjo	Natural Resources Mgmt. Spec.	Climate Change	GFADR
Stephane Forman	Senior Livestock Specialist	co-Team Leader	GFADR
Thang Toan Le	Procurement Specialist	Procurement Specialist	GGODR
Thu Thi Le Nguyen	Environmental Specialist	Operations Analyst	GENDR
Son Van Nguyen	Senior Environmental Specialist		GENDR
Nghi Quy Nguyen	Social Development Specialist	Social Safeguards	GSURR
Khang Van Pham	Consultant	Environmental Safeguards	GENDR
Ha Thuy Tran	Financial Management Specialist	FM Specialist	GGODR

Son Thanh Vo	Senior Rural Development Specialist	Team Lead	GSURR		
Non Bank Staff					
Name		Title		City	
Robert Moreland		FAO-CP Consultant			
Locations					
Country	First Administrative Division	Location	Planned	Actual	Comments
Vietnam	Cao Bang				
Vietnam	Hung Yen				
Vietnam	Thai Binh				
Vietnam	Hai Duong				
Vietnam	Hai Phong				
Vietnam	Ha Noi				
Vietnam	Thanh Hoa				
Vietnam	Nghe An				
Vietnam	Lam Dong				
Vietnam	Dong Nai				
Vietnam	Long An				
Vietnam	Ho Chi Minh City				
Institutional Data					
Parent (Vietnam Livestock Competitiveness and Food Safety-P090723)					
Practice Area / Cross Cutting Solution Area					
Agriculture					
Cross Cutting Areas					
[] Climate Change					
[] Fragile, Conflict & Violence					
[] Gender					
[] Jobs					
[] Public Private Partnership					
Sectors / Climate Change					
Sector (Maximum 5 and total % must equal 100)					
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %	

Agriculture, fishing, and forestry	Animal production	55		
Health and other social services	Health	35		
Agriculture, fishing, and forestry	Agricultural extension and research	10		
Total		100		
Themes				
Theme (Maximum 5 and total % must equal 100)				
Major theme	Theme	%		
Rural development	Rural services and infrastructure	38		
Rural development	Rural policies and institutions	36		
Rural development	Other rural development	26		
Total		100		
Additional Financing Additional Financing to Livestock Competitiveness and Food Safety Project (P151946)				
Practice Area / Cross Cutting Solution Area				
Agriculture				
Cross Cutting Areas				
[X] Climate Change				
[] Fragile, Conflict & Violence				
[X] Gender				
[X] Jobs				
[] Public Private Partnership				
Sectors / Climate Change				
Sector (Maximum 5 and total % must equal 100)				
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	Animal production	60	30	30
Health and other social services	Health	30	20	15
Agriculture, fishing, and forestry	Agricultural extension and research	10		10
Total		100		
Themes				
Theme (Maximum 5 and total % must equal 100)				

Major theme	Theme	%
Rural development	Rural services and infrastructure	38
Rural development	Rural policies and institutions	36
Rural development	Other rural development	26
Total		100

Summary of Proposed Changes

There are no changes to the PDO and as such, the AF will continue the pursuit of the PDOs through its components by supporting activities relating to:

- a. Scaling-up of interventions for GAHP household producers, wet markets and small slaughterhouses to enhance impact, with targets higher than the originals as geographic coverage is expanded within the 12 current project provinces. These activities will be primarily in Component A.
- b. Consolidating achievements of the first phase and improving the project's sustainability nationwide by: (i) building on the GAHP households' achievements by introduction of a group/cooperative approach for households as the medium for development of livestock production under Component A; and (ii) increasing support for institutionalization by GoV of its successes such as adoption of the food safety guidelines as national standards, strengthening and accreditation of the laboratory network under Component B.

With the Additional Financing in place, the new closing date will be December 31, 2018.

Change in Implementing Agency	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Project's Development Objectives	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Results Framework	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Safeguard Policies Triggered	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change of EA category	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Other Changes to Safeguards	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Legal Covenants	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Loan Closing Date(s)	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Cancellations Proposed	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Disbursement Arrangements	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Reallocation between Disbursement Categories	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Disbursement Estimates	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change to Components and Cost	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Institutional Arrangements	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Financial Management	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Procurement	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Implementation Schedule	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Other Change(s)	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]

Development Objective/Results

Project's Development Objectives

Original PDO

The project development objectives (PDOs) are to increase the production efficiency of household-based livestock producers, to reduce the environmental impact of livestock production, processing and marketing, and to improve food safety in livestock product supply chains (mainly meat) in Project Provinces.

Change in Results Framework

Explanation:

The Result Framework (RF) has been revised with some new intermediate indicators to reflect the additional activities to be covered by the AF. Key changes to the targets are presented in the Table 2, while the detailed RF is in Annex 1. The revised performance indicators are also set forth in the revised PIM which has been adopted by MARD. Achievements at the end of the current project period in 2015 will become baselines for the AF period.

Risk

Risk Category	Rating (H, S, M, L)
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Low
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Moderate
7. Environment and Social	Low
8. Stakeholders	Low
9. Other	
OVERALL	Moderate

Components

Change to Components and Cost

Explanation:

1. The components' names and structure will not change. The components costs are amended to capture the AF, as well as GoV's and private sector (through counterpart funding for the construction of waste management systems, upgrading of slaughterhouses, etc.) contributions. The cost of activities for the AF period is estimated at US\$ 54.68 million over three years from 2016, which will bring the total cost of LIFSAP to US\$ 133.68 over the nine years from 2010 to December 31, 2018, the proposed closing date with the AF operation. The Bank will contribute US\$ 44.68 million (81.7 percent of the total) while GoV will contribute US\$ 3.75 million (6.8 percent) and the private sector US\$ 6.25 million (11.5 percent).

Current Component Name	Proposed Component Name	Current Cost (US\$M)	Proposed Cost (US\$M)	Action
Upgrading Household-based Livestock Production and Market Integration	Upgrading Household-based Livestock Production and Market Integration	66.03	109.68	Revised
Strengthening Central-	Strengthening Central-	4.30	8.70	Revised

Level Livestock and Veterinary Services	Level Livestock and Veterinary Services			
Project Management, Monitoring and Evaluation	Project Management, Monitoring and Evaluation	8.70	13.50	Revised
	Contingency	0.00	1.80	New
	Total:	79.03	133.68	

I. INTRODUCTION

2. This Project Paper seeks the approval of the Executive Directors to provide Additional Financing (AF) in the amount of SDR32.2million (equivalent to US\$ 44.68 million) of IDA Credit for the Livestock Competitiveness and Food Safety Project (LIFSAP – P090723) in accordance with OP10.00 and as requested in April 2014 by the Government of Vietnam (GoV).

3. The AF will enable consolidation of the project’s initial achievements and scaling-up its original activities, including: extending the adoption of Good Animal Husbandry Practices (GAHP) to farmers in expanded geographical areas within the current 12 project provinces; institutionalizing, at national, province and district levels, proven best practices for livestock value chains¹; and introducing international best practices such as a veterinary statutory body/ veterinary council and animal rendering services.

4. The proposal for the AF is aligned with the Bank’s twin goals of poverty reduction and shared prosperity, and with the three pillars of the Country Partnership Strategy (CPS): competitiveness, sustainability and opportunity. It also responds to the priorities highlighted in the Bank’s Agriculture Action Plan and the three pillars of the Global Agenda for Livestock: health, environment and equity. The project will leverage international best practice from the World Organization for Animal Health (OIE) and International Livestock Research Institute (ILRI) and complements the GoV’s strategies for its livestock sub-sector by promoting higher productivity and efficiency while improving management of the environment and raising national and provincial capability to support and regulate livestock industries.

II. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

Background

5. **Country context.** Vietnam’s 90.7 (2014) million people are sustained by an economy that has grown at remarkable average 7.5 percent annually for 1992 – 2007 and 5.8 percent annually in 2008 – 2014. The agriculture sector accounts for 18 percent of GDP (2014) and generates nearly 47 percent of employment. The livestock sub-sector’s contribution to agriculture sector output is expected to rise rapidly from its current 26.3 percent (roughly 4.8 percent of GDP) to about 42 percent by 2020. Pig production contributes about 71 percent of the sub-sector’s total. Rising incomes have continued to stimulate rapid growth in demand and farmers have responded strongly to increase animal holdings and lift productivity and production but are unable, as yet, to satisfy fully the domestic demand for meat, milk and other livestock products.

6. **Livestock production as a major source of income for households.** Of the 15 million rural HHs, the livestock sub-sector, with 4.13 million HHs breeding pigs and 7.9 million breeding chickens, contributes strongly to poverty reduction and shared prosperity. Small-scale pig and poultry enterprises dominate livestock production², with herds of 1-5 animals in 2011 accounting for the vast majority (77.5 percent) of the nation’s pig-breeding

1 Examples are forming farmer groups or cooperatives for marketing and production, improving facilities for slaughtering and retail marketing, and development of regulatory and supervisory systems to ensure high quality and safe meat.

2 Livestock production in Vietnam is in mainly two forms: industrial farms and livestock households. In 2011, some 23 000 farms and 9.5 million household livestock producers accounted for 65 percent of the pigs and 70 percent of the poultry raised.

households. Livestock-keeping is especially important for poor households, as a major source of food and a means to save and accumulate capital.

7. **Rising output and demand for livestock products.** Increasing incomes have induced demand for livestock products to rise rapidly over the past ten years. Vietnam's average income is expected to continue to rise apace from the current estimated US\$2040³(2014) to roughly US\$ 2,895 in 2020 (in 2014 US dollar, and assumingly it increases by 6% annually), with the middle and affluent classes expected to more than double, from 12 to 33 million. Continuing increases in purchasing power of the population is expected to translate into increasing demand for all types of meat. Average annual meat consumption is now about 40 kg per person and is expected to reach nearly 50 kg by 2020. The Ministry of Agriculture and Rural Development (MARD) estimates that total meat consumption will grow from now to 2020 at average 2.9 percent yearly]. Future profitability for the livestock industry will depend as much on improving quality as on boosting the quantity of meat production.

8. Vietnam's livestock sub-sector has grown consistently at 5-6 percent annually despite economic slowdown and is trying to satisfy a large proportion (94 percent) of domestic demand. Total meat production has increased from 2.0 million tons in 2000 to 4.3 million tons in 2013, with average annual growth of 7.5 percent. The gap between domestic production and demand in 2013 was met by imports, including 78,000 MT of chicken⁴. Production of pork meat slightly exceeds demand at present; however, future demand is expected to outpace production and Vietnam will remain dependent on pork imports⁵. The supply/demand balance and the imminent tariff reductions under the ASEAN Free Trade Agreement in 2015 will place increasing pressure on Vietnam's livestock sub-sector, especially the pig and poultry industries, to become more efficient and competitive, including improved quality and safety, to meet consumers' expectations.

LIFSAP and Its Achievements

9. **Project context.** *The objectives of the Project are to increase production efficiency of household-based livestock producers, reduce environmental impact of livestock production, processing and marketing, and improve food safety in livestock product supply chains (mainly meat) in the Project Provinces.*

10. Key outcome indicators for each of the PDOs are:

- a) Reducing average animal mortality rates by 30 percent, reducing fattening times by 15 percent and increasing average animal herd-size of households by 30 percent in project-assisted households.
- b) Assisting household producers, slaughterhouses and fresh meat markets to comply with meeting environment hygienic standards (70 percent of project households, and 90 percent of project slaughterhouses and wet markets).
- c) Assisting slaughterhouses and meat markets to achieve national standards on food safety (90 percent of project slaughterhouses and wet markets).

11. **Performance to date.** The project was approved by the Board in August 2009 with the closing date of December 31, 2015 and a total cost of US\$ 79.03 million, financed by US\$ 65.26 million from IDA and US\$ 13.77 million from GoV. The project has been rated Satisfactory for both its progress towards PDO achievement and implementation for more

3 General Statistics Office of Viet Nam, 2014

4 <http://english.vietnamnet.vn/fms/business/110060/business-in-brief-20-8.html>

5 <http://www.antconsult.vn/news/vietnam-agribusiness-report-q1-2013.html>

than 12 months and is very much on track to achieve its PDOs, as detailed in the results framework in Annex 2.

12. On Livestock sector efficiency. Adoption of GAHPs has proven effective in improving livestock productivity, production and incomes for households by:

- a) reducing mortality rates from 15 to 11.8 percent for pigs against a completion target of 10.5 percent and from 41 to 33 percent for poultry against a completion target of 29 percent, thus raising farm output and income.
- b) reducing fattening times from 136 to 118 days for pigs⁶ against a completion target of 115 days and from 66 to 58 days for poultry against a completion target of 56 days, thereby lowering costs of animal feeding and allowing farmers to increase the intensity of production (from 2.0 to 2.2 batches per year for pigs and from 2.2 to 2.4 batches per year for poultry).
- c) increasing the herd and flock size from 25.6 to 30.7 for pigs (final target was 29.4), and from 935 to 1,365 for poultry (final target was 1,075), thus raising output and increasing returns.

13. On Environment Management. The Project has successfully addressed issues relating to environment management in production, slaughtering and marketing of pigs and poultry by:

- a) Assisting 9,905 households to improve their waste disposal systems and apply good production practices, achieved primarily as part of the introduction of GAHP.
- b) Assisting 23 medium and large slaughterhouses to install waste disposal systems and management practices that meet national standards.
- c) Assisting 124 small slaughterhouses to improve their waste management facilities and practices.
- d) Assisting 324 wet markets to improve their waste management facilities and meet national environmental standards.

14. On Safe Meat. The project has also contributed strongly to improving food safety for the benefit of consumers by:

- a) Assisting 124 small slaughterhouses to improve the safety of meat, as evidenced by inspection and testing for bacteria.
- b) Assisting 23 medium and large slaughterhouses to improve their meat handling and selling facilities and practices and satisfy national food safety standards.

15. The issues that affected implementation up to the end of 2012 (staffing issues, slow disbursement, lack of effective coordination, unbalanced attention to hardware investments, etc) have been thoroughly addressed at the Mid-Term Review of April 2013 and subsequently improved project management actions were taken at PCU and PPMUs. These have resulted in high disbursements for FY14 and first half of FY15, totaling to 86.3% of the credit as of end of January 2015.

6 Targets for fattening periods and herd/ flock sizes were originally expressed (para. 9) as percentage changes in percentages. To clarify the targets, the percentages set have been applied to the baseline data for each indicator, so that they are now expressed as numbers.

16. The Project Coordination Unit (PCU), representing MARD, has effectively overseen implementation in provinces and districts through the Provincial Project Management Units (PPMU). Activities have been completed generally in good time, with the result that progress towards meeting targets for outcomes has been good. Compliance with legal covenants and other provisions of the Loan Agreement, and safeguard requirements has been satisfactory.

Lesson Learned

17. The design of the AF benefited from learning of what worked and what did not from the parent project as well as other related projects such as the Agriculture Competitiveness Project (ACP). This section focuses more on the technical aspects whereas those relating to financial management, procurement and safeguards are embedded in the respective sections.

18. Firstly, the approaches that were proposed under the original project and refined during implementation are now being scaled up. These relate to the: (i) promotion and support to GAHP application; (ii) upgrading the slaughterhouse, both small and large scale; (iii) upgrading of meat markets, coupled with effective behavior changes and communications.

19. The GAHPs applied to the LIFSAP's targeted HHs were an adapted and simplified version of the pre-existing VietGAP certification process which was considered to be more relevant to large commercial farms. MARD has endorsed the application of the simplified GAHP version in project areas which is now considered appropriate for scale-up in smallholder livestock operation.

20. Similarly, the upgrading of slaughterhouses was originally restricted to medium and large scale operations. The small-scale slaughterhouses were not considered for support and deemed appropriate for closure. However, during the project implementation, it became apparent that it is crucial to address the sanitation and hygienic conditions of the small and medium scale slaughterhouses in the GAHP zones in the interim period while the large scale slaughterhouses development policy is being implemented progressively. This has now been assessed as another good practice and other non-project provinces are considering its adoption.

21. For the upgrading of meat markets, the project has set the established approach for meat markets with on-going adaptive approach where designs for meat market upgrading were assessed and reviewed after each round for further modification. No fixed design was developed which helped to improve the upgrading work over time. One key lesson here is that the meat market design has to be developed in consultation with market vendors and users.

22. Secondly, the project chose to focus on prevention measures rather than being reactive. The feed quality testing and animal diseases surveillance piloted under the project are two examples of pro-active actions taken to control the quality of feed regularly and to promote early detection of potential diseases. These two surveillance plans were considered effective and project provinces have now allocated their own budgets to conduct these surveys. Training and meat inspection practices applied in the LIFSAP have also contributed to change the behaviors of the meat vendors, especially when awareness campaigns and inspections were conducted with a focus on the tools and equipment before meat selling. The vendors became better aware about the importance of keeping their tools and equipment clean.

23. Thirdly, the parent project has so far tended to focus more on individual households. However, it has been learnt that individual farmers, once grouped and acting collectively, would gain more from overall improved production environment (especially relevant to livestock sector where externalities such as environment plays crucial role) and from joint forces in buying production inputs (feeds and veterinary products) and selling outputs. The AF will support and promote further collective actions through assisting GAHP HHs towards forming or consolidating collaborative groups and/or cooperatives. The lessons from the ACP will be used in guiding the way the groups are supported and linked to market value chain.

24. Finally, under the AF, these groups and cooperatives will be supported in establishing “productive alliances” or formal contractual partnerships with others stakeholders in the value-chains (inputs suppliers, feed producers, processors or middlemen/traders). Experience from the ACP would be evaluated for adoption in the project.

Rationale for Additional Financing

25. GoV’s request for the AF was made in the context of LIFSAP’s success in introducing innovative good practices for animal husbandry and food safety. The AF will contribute directly to GoV’s restructuring of the agriculture sector and to ongoing efforts to build consumer trust in the domestic livestock supply chain by improving quality and safety of food for domestic and international markets. This AF will support scaling-up of LIFSAP’s proven activities and to introduce some new activities for institutionalization of processes and procedures to reinforce sustainability of impacts.

26. The AF retains the original project’s objectives, and its components and sub-components. It supports the scaling-up of activities including wider and deeper adoption of GAHP by livestock farmers within the 12 participating provinces, expanding the application of best practices along value chains for livestock products and introducing policies to develop further, to international best practice standards, the quality of veterinary services. This new phase will demonstrate the approach to transforming the quality of the livestock sub-sector, including institutionalizing the first phase’s successes and promoting focused policy dialogue and reforms. This AF will take into account the experiences (what worked and what did not work) on project management, fiduciary and safeguards from the parent project. Detailed information on lessons learnt is embedded in the respective appraisal sections below.

27. The AF to LIFSAP will assist in expanding and deepening the process of transforming the pig and poultry meat industries initiated under the original project by further modernizing and upgrading facilities and practices throughout their value chains. Household production of pigs and poultry has been characterized by low investment, small herds/ flocks, low inputs, poor quality animals, high levels of disease and mortality, low turnover, limited markets and high risks, all of which lead to low returns. Adoption of GAHP has transformed the sector in the project provinces by increasing the use of inputs, shift to larger herds/ flocks of better quality animals, incidence of lower disease and mortality, more diverse markets, higher prices and turnover and lower risk. This has resulted in substantial increases in incomes. Slaughterhouses were characterized by small and inadequate investment, with little concern for waste management, poor handling to address hygiene and safety, low throughput and low productivity. LIFSAP’s support (capital, training and TA) has made a good start in transforming slaughterhouses to have: higher investment, facilities and systems to manage environment issues, attention to food safety and higher throughput, productivity and returns. Fresh meat markets were characterized by low quality, inadequate facilities within urban food markets with little space, limited ventilation, poor hygiene services (display tables, water and electricity supplies), inadequate waste disposal and poor access for buyers. LIFSAP’s support

has transformed the markets with better buildings with greater space and good ventilation, adequate display tables with access to water and electricity, waste disposal services and better access for buyers; vendors at the markets, predominantly women, report improved working and business conditions.

28. These significant improvements at various links of the supply chains (primarily on farms and in slaughterhouses and wet markets) have been demonstrated and proven by LIFSAP in its first five years can be sustained and extended only if there is action in two areas: policy formation and supervision and provision of veterinary and technical services to support operators along the supply chains. The AF operation will contribute significantly to GoV's modernization programs in the livestock sub-sector through assistance in both of these key areas.

III. Proposed Changes

29. There are no changes to the PDO and as such, the AF will continue the pursuit of the PDOs through its components by supporting activities relating to:

- a. Scaling-up of interventions for GAHP household producers, wet markets and small slaughterhouses to enhance impact, with targets higher than the originals as geographic coverage is expanded within the 12 current project provinces. These activities will be primarily in Component A.
- b. Consolidating achievements of the first phase and improving the project's sustainability nationwide by: (i) building on the GAHP households' achievements by introduction of a group/cooperative approach for households as the medium for development of livestock production under Component A; and (ii) increasing support for institutionalization by GoV of its successes such as adoption of the food safety guidelines as national standards, strengthening and accreditation of the laboratory network under Component B.

30. The AF will emphasize capacity building initiatives, including support to cooperatives and less formal groups for production and marketing, improving management of meat markets, and assistance to GoV for legal and policy dialogue and reform. The results framework (RF) has been revised to: (i) reflect the scaling-up of activities related to GAHP groups, slaughterhouses and meat markets; and (ii) capture and reflect the project's proposed efforts to ensure sustainability and institutionalization of best practices and achievements of the first phase.

31. **Component A: Upgrading Household-based Livestock Production and Market Integration:** The AF modifies the original LIFSAP approach to become more transformative, in addition to scaling-up its support for GAHP households, wet markets and small slaughterhouses in the same provinces as the original project:

- a. **Focusing on groups and cooperatives:** While the project has built up advocacy for formation of groups for production and marketing operations, the concepts and potential benefits are understood only partly by producers and extension services. By introduction of a group/cooperative approach the AF will prioritize development of these groups and cooperatives during the AF as: (i) an entry point to promote GAHP accreditation for sustainability, as the current system is not viable, being too expensive from the perspectives of households and too cumbersome from that of accreditors as there are too many households to inspect; (ii) a way for households to gain better access to inputs, TA and markets; and (iii)

a source of income for cooperatives and their members, for example by selling animal feed and provision of services such as feed milling and mixing. This component will develop curricula and train households and extension staff and provide incentives such as matching grants. The project will promote collective actions to strengthen current GAHP groups to become more capable and informed actors in production and in linking with markets, as both buyers and sellers. Block grants will be used to finance business proposals developed by the GAHP groups, with support from TA and/or local facilitators. Capable informal groups that effectively use the block grants and TA will move up the ladder to join the tier of collaborative groups, and thereafter of cooperatives, as their operations become more formal.

- b. **Alliances and partnerships:** The AF will help stakeholders along the value chains to establish and consolidate “productive alliances” or “partnerships” (contractual relationships) as win-win mechanisms to ensure availability of inputs and markets and competitiveness of prices. Groups of households will enter into arrangements with pig and poultry breeders, maize and animal feed producers, input suppliers, middlemen/ traders, slaughterhouses and fresh meat markets. Applicable lessons will be drawn from the closed Bank-funded Agriculture Competitiveness project, especially to ensure that preparation is adequate, that incremental steps to collective action are taken including developing core organizational, management skills and effective governance first, and ensuring that only best-organized groups and cooperatives are involved in building productive alliances with suppliers’ groups or agribusinesses.
- c. **Fresh meat and live market management:** The AF will strengthen wet markets’ management by involving retailers in their boards, thus better addressing their priorities, negotiating sustainable usage fees, and introducing transparency in management procedures. The AF will support, in addition to pork and poultry meat markets, the rehabilitation and improved management of the buffaloes and beef cattle U Market in Nghe An Province. This market gathers about 3,000 buffaloes from throughout Vietnam, Lao PDR and Myanmar every six days to be sold and distributed to all provinces for meat or breeding. The project will also support similar buffalo and beef cattle markets in Cao Bang Province which serve the same purposes. The current market systems pose a real threat to animal health as disease control is almost impossible, given the poor infrastructure. Support to these important markets will clearly contribute to achieving the PDOs and is an economically attractive investment that will generate revenues for the communes and provinces.

32. The AF will also address issues relating to dead animal and slaughter waste by introducing and making available effective solutions for deficiency in operations along the value chains from farm to consumers to ensure safe meat. LIFSAP and the concerned services of MARD, the Department of Livestock Production (DLP) and the Department of Animal Health (DAH) have put in place practical solutions for most critical issues (for example, use of antibiotics or hormones by farmers, disease prevention in farms, animal waste treatment, meat inspection, transport hygiene). However, handling potentially pathogenic waste (e.g. from dead or culled animals, or from condemned animal by-products) during the slaughter process needs to be improved.

33. **Component B: Strengthening Central-level Livestock and Veterinary Services.** LIFSAP has already achieved much in this component, through capacity building and

training (for meat inspectors, decentralized staff from DARD, DLP and DAH), strengthening the Center for Testing Livestock Breeds and Feeds, development or improvement of key guidelines for surveillance of animal diseases, food safety and good hygiene practices and protocols and sampling methods for monitoring prevalence of animal diseases and pathogens/residues in products and effluents. The good practices developed, tested and applied under the Component A of the parent project are considered relevant to be applicable nationwide.

34. The AF will support MARD to strengthen its collaboration with other line ministries (Environment, Trade, Technology and Science) and assist development of advocacy capability for civil society organizations including national associations of producers, unions of cooperatives and veterinary associations. Bringing international expertise on some topics will benefit the project, MARD and livestock stakeholders; such expertise will be essential for some new activities such as creating a veterinary statutory body, including food safety good practices in veterinary studies curricula, and developing Reference Center status for the Animal Breeding and Feeding Laboratory.

35. Policy dialogue could, in turn, have strong impact on the project's achievements in such aspects as: (i) groups and cooperatives (legal framework, rights and duties, curriculum); (ii) national environmental standards and their applicability to rural livestock-producing areas; (iii) national standards on animal feeding and breeding, including enforcement by strengthening the related laboratory network for testing; (iv) enforcement of the legal framework on slaughtering, including communication and public awareness, capacity building and cooperation between agencies; (v) institutionalizing food safety standards through, in particular, reviewing veterinary education curricula to include food safety; and (vi) veterinary services and animal health.

36. Vietnam has already received the evaluation of its veterinary services and the subsequent gap analysis, as part of OIE's well-recognized tool *Performance of Veterinary Services* (PVS) Pathway. In particular, Vietnam is currently reviewing its animal health legal framework with the aim of making it compliant with international standards; OIE has conducted a mission to help this initiative. LIFSAP in the AF period will be innovative, to facilitate efforts to pilot initiatives aiming at delegating some tasks of public good nature to private veterinarians through the so-called "sanitary mandate". International expertise from OIE will complement the project's efforts to help GoV improve the "governance" of veterinary practice.

37. **Component C: Project Management and Monitoring and Evaluation.** The AF envisages little change to this component as the support it has provided to national and provincial agencies has been effective and should be continued.

38. International expertise bringing advice and technologies remains crucial to LIFSAP because of its innovative nature in the Vietnam context. The possibility of extending the working collaboration with ILRI will be investigated to ensure the project's success and to maintain the current high standard of results monitoring and impact assessment.

39. The communication strategy will be reviewed, updated and maintained to adapt to implementation progress, as well as to targeted beneficiaries (especially GoV, donors and partners, value chain stakeholders and consumers).

Expected Outcomes from the Additional Financing

40. The Result Framework (RF) has been revised with some new intermediate indicators to reflect the additional activities to be covered by the AF. Key changes to the targets are

presented in the Table 2, while the detailed RF is in Annex 1. The revised performance indicators are also set forth in the revised PIM which has been adopted by MARD. Achievements at the end of the current project period in 2015 will become baselines for the AF period.

Table 2. Project Outcome Indicators

Outcome Indicators	Unit	Baseline (2010)	Achievement (to 2014)	Baseline for AF (2015)	Changes with AF	Revised Project Targets
Increase the Production Efficiency of Household-based Livestock Producers						
Livestock mortality rates reduced	% of pigs	15	11.8	11.8	-1.8	10
	% of poultry	41	33.2	33.2	-4.2	29
Livestock fattening times shortened	Days for pigs	135	118	118	-2	116
	Days for poultry	66	58	58	-2	56
Herd/ flock numbers increased	Number pigs	26	31	31	+9	40
	Number poultry	935	1,365	1,400	+400	1,800
Reduce the Environmental Impact of Livestock Production, Processing and Marketing						
Households supported by the project with lessened adverse environment impacts from their production	Households	0	9,905	11,000	+14,000	25,000
Small slaughterhouses supported by the project with lessened adverse environmental impact from slaughtering	Number	0	124	175	+135	310
Medium and large slaughterhouses supported by the project meeting national environment standards	Number	0	19	25	+15	40
Wet markets supported by the project meeting national environmental standards	Number	0	311	400	+100	500
Improve Food Safety in Livestock Product Supply Chains in Selected Provinces						
Small slaughterhouses upgraded by the Project meeting improving meat quality and safety	Number	0	143	175	+135	310
Medium and large supported slaughterhouses meeting national food safety standards	Number	0	19	25	+15	40
Supported wet markets meeting national meat quality and safety standards	Number	0	311	400	+100	500
Beneficiaries (of whom, female)	Number	0	105,609	105,609	+29,391	135,000
	Percent	0	47.7	47.7	+7.3	55

Project Costs

41. The cost of activities for the AF period is estimated at US\$ 54.68 million over three years from 2016, which will bring the total cost of LIFSAP to US\$ 133.68 over the nine years from 2010 to December 31, 2018, the proposed closing date with the AF operation.

Table 3. Project Cost Summary (US\$ million)

Component/ Sub-component	Original Allocation	Proposed for AF	Total Cost
A. Upgrading Household-based Livestock Production and Market Integration			
A.1 Promoting GAHP in Priority Livestock Production Areas	26.7	21.68	48.38
A.2 Piloting the Livestock Planning Zones	7.3	0.2	7.5
A.3 Upgrading Slaughterhouses and Meat Markets	32.0	21.8	53.8
Total Component A	66.0	43.68	109.68
B. Strengthening Central-level Livestock and Veterinary Services			
B1. Strengthening the Capacity of the DLP	3.3	2.4	5.7
B2. Support for DAH in Enhancing Bio-security and Disease Control	1.0	2	3

	Total Component B	4.30	4.4	8.7
C.	Project Management and Monitoring and Evaluation			
	C1. Project Management	3.4	1.4	4.8
	C2. Monitoring and Evaluation	5.3	3.4	8.7
	Total Component C	8.7	4.8	13.5
D.	Contingency	0	1.8	1.8
	Total Project	79.0	54.68	133.68

42. The Bank will contribute US\$ 44.68 million (81.7 percent of the total) while GoV will contribute US\$ 3.75 million (6.8 percent) and the private sector US\$ 6.25 million (11.5 percent).

Table 4. Project Financing Plan (US\$ million)

Component	Financier			
	IDA	GoV	Private	Total
Parent Project				
A. Upgrading Household-Based Livestock Production and Market Integration	53.8	1.9	10.4	66.0
B. Strengthening Central-Level Livestock Production and Veterinary Services	4.2	0.2	0	4.3
C. Project Management and Monitoring and Evaluation	7.2	1.4	0	8.7
Total Cost Parent Project	65.2	3.4	10.4	79.0
Additional Financing				
A. Upgrading Household-Based Livestock Production and Market Integration	36.02	1.42	6.25	43.69
B. Strengthening Central-Level Livestock Production and Veterinary Services	4.27	0.09	0	4.36
C. Project Management and Monitoring and Evaluation	2.59	2.24	0	4.83
D. Contingency	1.8	0	0	1.8
Total Cost AF	44.68	3.75	6.25	54.68
Total Parent Project and Additional Financing				
A. Upgrading Household-Based Livestock Production and Market Integration	89.82	3.32	16.65	109.69
B. Strengthening Central-Level Livestock Production and Veterinary Services	8.47	0.29	0	8.66
C. Project Management and Monitoring and Evaluation	9.79	3.64	0	13.53
D. Contingency	1.8			1.8
Total Cost All Project	109.88	7.25	16.65	133.68

IV. APPRAISAL SUMMARY

Economic and Financial Analysis

43. The readily quantifiable project benefits are dominated by increases in farm profitability as a result of improved farm production and market access: (a) reduced production costs arising primarily from improved feed conversion; (b) reduced prices of feed inputs and increased prices of outputs resulting from farmers forming groups for negotiation of prices with suppliers and buyers; and (c) higher animal productivity from better husbandry and support of veterinary and technical services. The benefits resulting from these activities generate an economic internal rate of return (EIRR) of about 22 percent for the project as a whole, which is much higher than the opportunity cost of capital.

44. Financial analysis showed that farmers purchasing and fattening 40 piglets twice each year will increase their net incomes by as much as 87 percent with a typical enterprise lifting net incomes from VND 21.2 to 39.9 million and generating a financial rate of return (FIRR) of 47 percent. A farmer buying and fattening four batches of 1,000 chickens each year might lift enterprise net income by as much as 105 percent, from VND 5.7 to 11.7 million and

gaining an FIRR of 34 percent. As well as helping current producers, the AF will bring benefits to farmers who: (i) increase herd/ flock size, including those taking up livestock for the first time; and (ii) increase the intensity of production from the current 2.2 and 4.0 batches per year for pigs and poultry respectively.

45. The project could further its transformative function and raise returns by paying attention to reducing costs, to increasing productivity and to raising and stabilizing marketability and prices of pig and poultry meat. The project's adoption of a group approach is expected to increase competition among suppliers of feeds to reduce prices. Support for farmers to mill and mix their own feeds from combinations of available crops and by-products and prepared feeds from specialist companies might reduce feed costs. The price of breeding stock might be reduced by supporting the entry or development of new breeders, as supply is limited and competition not strong in either pig or poultry industries.

46. The project's direct impact is on only 12 of 58 provinces and 5 municipalities of Vietnam. Most importantly, the long term impact of the project should be intensified by strengthening the production and delivery to consumers of high quality and safe meat. There is considerable evidence that the consumers of Viet Nam are paying increasing attention to safety and quality of meat and are willing to pay price premiums for this. The project would support establishment of "brands" in differing forms that will provide assurance and confidence to consumers and generate higher returns to producers, slaughterers and marketers, and greater safety and less meat-caused malaise among consumers.

47. The project will have a variety of benefits that cannot be readily quantified but could be very substantial. First, improved food safety reduces illness among consumers and thereby reduces the costs of treatment and production lost through absences of workers from their occupations. Second, attention to animal health should provide major benefits in reducing diseases and lowering their impact on animal productivity, as veterinary and technical services are improved and farmers are trained in identifying and reporting disease outbreaks. Third, the potential for considerable improvement in environment management through waste usage or disposal and zoning of animal-keeping areas to minimize adverse impacts. These not readily quantified benefits add substantially to the overall contribution that the project will make to the pig and poultry meat industries.

Technical

48. The AF will consolidate interventions that have demonstrated their innovative nature and technical soundness to sharpen competitiveness of livestock production and to improve food safety. The external and independent accreditation of producers, as well as the support for small-scale private sector interests by addressing "negative externalities" of livestock development by focusing on interventions for the public good (e.g. waste management and food safety in slaughterhouses), while new to Vietnam, is very much exemplary of how public investments can support the livestock sub-sector. This consolidation will take place through: (i) institutionalization by GoV of guidelines and practices to support livestock development; and (ii) increasing incentives to producers and value-chain stakeholders to maintain high-level standard good practices by, for instance, promoting collective actions to reduce costs and increase benefits.

49. The AF will extend LIFSAPs' interventions to new GAHP households and groups and to new wet markets and slaughterhouses to enhance its impact. It will expand implementation of good practices to new producers, therefore increasing pig and poultry productivity and extending the socio-economic benefits. It will continue enhancing food safety in 12

provinces, responding to growing health concerns of consumers. Neighboring districts and provinces might be induced to introduce similar standards and practices.

Implementation Arrangements

50. The implementation arrangements established for the parent project will be used as for the AF, with the PCU that has successfully overseen planning and operations to date continuing its current roles including overall coordination, provision of technical assistance to project provinces, overseeing the quality of implementation and ensuring compliance with Bank policies and guidelines, notably for fiduciary and safeguards aspects. The cross-ministerial Central Steering Committee for LIFSAP will be revitalized and reinforced to ensure better institutionalization of achievements and increase the focus on policy dialogue and reforms, including improvements to the regulatory framework. It will meet quarterly to guide the PCU on policy reform and priorities and to help it to address cross-sectoral issues such as environment standards and veterinary education. The 12 PPMUs will remain responsible for implementing activities in cooperation with province and district level government. The PPMUs will strengthen their day-to-day collaboration with Departments of Livestock Production, Animal Health and Cooperatives Development to ensure alignment of the project's interventions with province strategies and plans.

51. **Monitoring and evaluation.** The PCU arranged a thorough baseline survey in 2010. An interim end-line survey at the end of 2015 will measure the impact of the parent project and in turn, serve as the baseline for the AF. The project's Monitoring and Information System (MIS) has been well designed and maintained to provide updated information to inform management decisions.

Fiduciary Aspects

52. **Financial management:** The review of both central and province levels concluded that the project's current arrangements for financial management meet the Bank's requirements, as stipulated in BP/OP 10.00 and remain adequate for the project under the AF. In general, the financial management arrangements will remain as in the original design, with the PCU responsible for the project's designated account and submission of required interim financial reports and audited reports to the Bank. The PPMUs will be responsible for preparing the semi-annual interim un-audited financial reports for submission to the PCU for consolidation.

53. The financial management risk for the AF is assessed to be "moderate" as the PCU and PPMUs have accumulated experience from the parent project and the activities under FA are similar to those ongoing. There is no outstanding audit issue. The financial management has been updated in the relevant project documents, including the financial management manual.

Procurement

54. **Procurement risk.** The procurement risk for the AF is rated "moderate" considering that: (i) the implementing agencies have reasonably good experience in Bank procurement procedures; and (ii) procurement activities under the AF are of the same scale and complexity as for the existing project. However, procurement training courses/ workshops should be conducted to familiarize the implementing agencies with the Bank's updated procurement procedures and applicable Bank Guidelines in the newest version dated January 2011 and revised July 2014.

55. **Applicable procurement procedures.** Procurement under the proposed additional credit will be carried out in accordance with the Bank's "*Guidelines: Procurement of Goods,*

Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers” dated January 2011, revised July 2014 (the Procurement Guidelines); “*Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*” dated January 2011, revised July 2014 (the Consultant Guidelines); and the provisions stipulated in the Financing Agreement.

56. **Procurement plan.** An acceptable procurement plan that has been prepared for the additional credit will be updated annually, or as required. The thresholds for procurement methods and Bank prior review under the original project will be applied for the AF.

Social and Safeguards

57. **Social safeguards.** Implementing agencies for the parent project have performed well in complying with the Bank’s social safeguard policies, especially OP 4.10 Indigenous People. Supporting activities for ethnic minority communities have been developed and/ or mainstreamed in Cao Bang, Lam Dong and Dong Nai Provinces. The aim is to ensure equitable access to project benefits for ethnic minority groups compared to others. Specific activities include additional training on GAHP, support for upgrading farms and equipment and consultation with ethnic minority people. While no resettlement plan was prepared in respect of OP 4.12, the PCU and PPMUs have developed transitional plans to minimize impact/ disturbance of existing vendors in markets. Two social safeguard policies (OP 4.12 Involuntary Resettlement and OP 4.10 Indigenous People) remain triggered in this AF. MARD has reviewed and updated the Resettlement Policy Framework (RPF) and the Ethnic Minority Policy Framework (EMPF), which were prepared under the parent project. The participating provinces, although unchanged in this AF, must reframe activities to fit best with their needs. At appraisal, no need has been identified for preparation of specific plans such as RP or EMDP. The updated RPF and EMDF have been publicly disclosed at project sites, Vietnam Development Information Center (VDIC) and InfoShop as per requirement of Bank policy on November 28, 2014.

58. **Gender mainstreaming.** The project has successfully addressed specific gender-related issues through inclusive training for male and female beneficiaries, improvement of working conditions for meat vendors (most of whom are women) in the meat markets, and working with the Vietnam Women’s Union (VWU) to strengthen GAHP groups. The AF will provide incentive to agencies to continue strengthening it.

59. MARD conducted a mini gender assessment during preparation, to inform further the project design, that focused on (i) available data about beneficiaries, disaggregated by gender; (ii) potential barriers to female-headed households accessing project benefits; (iii) gender-related interventions in the original project; and (iv) recommendations for gender-related activities in the AF. The PCU and PPMUs will apply lessons from the assessment to keep the momentum generated in the original phase by replicating a number of activities in the AF. The PCU and PPMUs will develop an M&E system to include:

- Workshops (arranged by the PPMUs of 12 provinces) to learn from experience and identify orientation for VMU.
- Advanced training courses (organized by PPMUs) for behavior change for female GAHP farmers.
- Training to enhance capacity for leaders of groups in management and communication skills for behavior advocacy and change.
- Training for women on obtaining and using credit from the Bank for Agriculture and Rural Development and other financial institutions and in developing business plans for loan proposals.

- Customer conferences with participants including banks, feed providers, breed providers, veterinary medicine providers and GAHP households.
- Training for businesswomen in food safety and visits to GAHP models and slaughterhouses that meet standards.
- Monitoring and evaluation of implementation of hygiene processes by female traders at markets.
- Establishment and maintenance of businesswomen's groups.

60. **Environment safeguards.** LIFSAP AF remains an "Environment Category B" classification under OP/BP 4.01. Its overall environmental and social impacts are assessed to be positive. Negative impacts are assessed to be small, temporary, site-specific and manageable and can be avoided or minimized through proper design and application of mitigation measures.

61. The types of infrastructure investment supported under the AF will remain the same. The AF will continue to trigger two environment safeguard policies: OP 4.01 (Environmental Assessment) and OP 4.09 (Pest Management). MARD have updated the Environmental and Social Management Framework (ESMF) to reflect changes in GoV's policy framework that are relevant to the project and to include additional districts and communes. No new specific environmental management plan or ECOP/ EPC was formed in preparation of the AF as no new LPZ or wet markets and slaughterhouses were identified prior to appraisal. The updated ESMF, along with other safeguard documents and instruments, were consulted and publically disclosed at project sites, in the Bank's InfoShop and Vietnam Development Information Center on November 28, 2014.

62. The AF will continue the parent project's matching grant program of designing and building livestock waste and wastewater treatment facilities for farms and slaughterhouses. That program prepared 479 environmental protection commitments (EPC) for the parent project in line with the ESMF, of which 355 were for wet markets and 124 for slaughterhouses. All EPCs were disclosed in project communes. The PPMUs monitored activities in collaboration with Departments of Natural Resources and Environment (DONRE) to ensure agreed measures were followed. An EMP for a selected pilot LPZ in Dong Nai was prepared, consulted and disclosed in project communes.

63. Training on GAHP to households has improved farmers' awareness and resulted in their application of safety measures in livestock production and proper waste treatment and management. Traders' awareness of hygiene and food safety has improved and waste management systems and hygienic conditions in upgraded wet markets are much improved. Some important improvements are: (i) trees have been planted in some upgraded wet markets where land is available; (ii) wastewater treatment systems supported by the parent project in slaughterhouses are operating well and the quality of wastewater after treatment meets required national standards under supervision of province DONREs; and (iii) biogas schemes and composting supported by the parent project have contributed to improved management of animal waste at households.

Climate Change Risk and GHG Emissions Reduction

64. Vietnam was identified for implementation of the third IDA 17 policy actions on climate investment plans to help mainstream climate change and disaster risk management and resilience in key processes of economic planning (such as national development plans

and investments programs/ budgets)⁷. The Climate and Disaster Risk Screening Tool⁸ completed for LIFSAP on November 7, 2014, rated the risk as “moderate”. The potential high impact due to exposure from hazards is modulated by the project's non-physical components (enabling and capacity building activities) and the larger development context to determine overall risk to the intended project outcome. Subsequently, with the incorporation of the disaster response activity as a specific sub-component, residual risk in Systematic Operations Risk-Rating Tool (SORT) was rated as “moderate”.⁹ In addition to project design, climate change risk will be addressed during implementation - through studies, TORs, consultation and dialogue with stakeholders.

65. The project will arrange for accounting and reporting reductions in greenhouse gas (GHG) emissions associated with its livestock operations. The planned project intervention will result in net GHG sink of 22.7 million tons of CO² equivalent. The sink results primarily from GAHP that are being introduced to additional groups in an expanded geographical area. Investments in waste management technologies (biogas digesters and compost units) are also a significant carbon sequestration source. The increase in GHG sequestration will lead to other benefits including improved animal health and energy savings, associated with biogas digesters.

Potential Risks and Mitigation

66. The overall risk rating for the project is moderate. Two emerging risks are the capacity of GoV to institutionalize fully the project’s achievements and successes and the sustainability of household-level production efficiency after project interventions. The project will put specific focus on these aspects to mitigate risks, including by adding indicators to capture progress. The project will pilot brand-naming of LIFSAP products in the best-performing provinces to increase farm-gate prices and as an incentives to producers to continue adopting GAHP after project closure.

World Bank Grievance Redress

67. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank’s corporate Grievance Redress Service (GRS), please visit

7 This action coincides with the ongoing Bank engagement to strengthen Vietnam's climate change and green growth policy, finance, execution and reporting and is already embedded in GoV’s request to the Bank to develop a climate change/ green growth resource mobilization framework. The output of the work under this framework would include an investment and financing/resource plan that provides a link between Vietnam's climate change adaptation and mitigation financing, as well as DRM, needs, the various financing sources (international and domestic, public and private), and in-country delivery mechanisms. This will include specific geographic area of focus, in particular the Mekong.

8 A form of due diligence for IDA-financed operations introduced in July 2014.

9 According to the screening tool, the “ratings throughout the tool should reflect the measures you have already designed to reduce risks from climate and disasters. For example, if you are already planning to base the design of your project on future climate projections of precipitation, the rating of potential impact should be lower than if you did not have plans to do so”. The final rating is to be confirmed.

www.worldbank.org/grs. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Revisions to the Results Framework

Current (PAD)		Proposed		Comment/ Reason for Change
OUTCOME INDICATORS				
The PDOs are to:		The PDOs are to:		
1.	Increase production efficiency of household-based livestock producers	1.	Increase efficiency of household-based livestock production through adoption of GAHP	Change wording order to express the objective more precisely only.
2.	Reduce environmental impact of livestock production, processing and marketing	2.	Reduce environmental impact of livestock production, processing and marketing	UNCHANGED
3.	Improve food safety in livestock product supply chains, mainly meat, in selected provinces	3.	Improve food safety in livestock product supply chains, mainly meat, in selected provinces	UNCHANGED
PDO indicators				
1.	Increase production efficiency of household-based livestock production through adoption of GAHP	1.	Increase efficiency of household-based livestock production through adoption of GAHP	UNCHANGED
•	Reducing mortality rate (target 30%)	•	Livestock mortality rates reduced . From 15% to 10% for pigs . From 41% to 29% for poultry	More specific targets for the AF period, set in the light of experience. The wording orders are changed to make it clearer. Measuring units are changed from percentage of percentage to absolute number for ease of monitoring and clarity.
•	Reducing fattening period by 15%	•	Livestock fattening times shortened . From 135 to 116 days for pigs . From 66 to 56 days for poultry	
•	Increasing the size of flocks by 15%	•	Herd/ flock numbers increased . From 26 to 40 for pigs . From 935 to 1,800 for poultry	
2.	Reduce environmental impact of livestock production, processing and marketing	2.	Reduce environmental impact of livestock production, processing and marketing	UNCHANGED
•	Percentage of livestock producers supported by the project meeting environmental standards (from 0 to 70%)	•	Households supported by the project with lessened environment impacts from their production (from 9,905 in Year 5 to 25,000 in Year 9)	REVISED Specification of the targeted number of households. There are in fact no environmental standard for households level production. Thus, the indicator is revised to capture precisely the nature of the project support to GAHP households to reduce the adverse impacts that the household production has to environment.

●	Percentage of slaughterhouses supported by the project meeting environmental standards (from 0 at the baseline to 90% in Year 5)	●	Small slaughterhouses supported by the project with lessened adverse environmental impact from slaughtering (from 124 in Year 5 to 310 in Year 9)	NEW Added to monitor progress of the work with small slaughterhouses introduced by the project at mid-term.
		●	Medium and large slaughterhouses supported by the project meeting national environmental standards (from 19 in Year 5 to 40 in Year 9)	REVISED Medium and large slaughterhouses separated from small slaughterhouses, as project assistance is different. National Technical Regulation on Industrial Wastewater QCVN40:2011/BTNMT
●	Percentage of meat markets supported by the project meeting environmental standards (from 0 at the baseline to 90% in Year 5)	●	Wet markets supported by the project meeting national environmental standards (from 311 in Year 5 to 500 in Year 9)	REVISED Numerical target replaces percentage. National Technical Regulation on Industrial Wastewater QCVN40:2011/BTNMT
3.	Improve food safety in livestock product supply chains, mainly meat, in selected provinces	3.	Improve food safety in livestock product supply chains, mainly meat, in selected provinces	UNCHANGED
●	Percentage of slaughterhouses supported by the project operating at the national hygienic standards (from 0 at the baseline to 90 in Year 5)	●	Small slaughterhouses supported by the project producing meat with improved quality and safety (from 143 in Year 5 to 335 in Year 9)	NEW Added to monitor progress of the work with small slaughterhouses introduced by the project. Circular No.60/2010/TT-BNN Circular No.57/2012/TT-BNN National Technical Regulation on Industrial Wastewater QCVN8-3:2012/BYT Circular No.24/2013/TT-BYT
		●	Medium and large slaughterhouses supported by the project meeting national food safety standards (from 19 in Year 5 to 40 in Year 9)	REVISED Medium and large are separated from small slaughterhouses, as project assistance and applicable standards are different. Circular No.60/2010/TT-BNN Circular No.57/2012/TT-BNN National Technical Regulation on Industrial Wastewater QCVN8-3:2012/BYT Circular No.24/2013/TT-BYT
●	Percentage of meat markets supported by the	●	Supported wet markets meeting national meat	REVISED

	project operating at the national hygienic standards (from 0 at the baseline to 90% in Year 5)		quality and safety standards (from 311 in Year 5 to 500 in Year 9)	Standards specifications clarified. Numerical target replace percentage. Circular No.57/2012/TT-BNN National Technical Regulation on Industrial Wastewater QCVN8-3:2012/BYT Circular No.24/2013/TT-BYT
			Number of Beneficiaries	NEW
			(of whom, female)	This is one of the required core sector indicators to be collected.

INTERMEDIATE OUTCOME INDICATORS				
Component A: Upgrading Household-based Livestock Production and Market Integration				
•	Not applicable	•	GAHP collaborative groups/ cooperatives are established and in effective operation	NEW Added to measure the project's progress in supporting establishment and operation of farmer groups as a new activity for the AF
•	Number of household producers in priority production areas applying GAHP (from 0 at baseline to 8,500 in Year 9)	•	Groups of livestock producer households in priority production areas having received GAHP certification (from 0 in Year 5 to 1,200 in Year 9)	REVISED Indicator and metric changed to reflect the project's shifting its support from individuals to groups of livestock producers. At the same time, certification to individual households is changed to certification to groups.
•	Percentage of project-supported LPZs applying regulatory framework (from 0 at baseline to 90 in Year 5)	•	Not included	DELETED At mid-term review, the development of LPZs was considered not viable but the client insisted on piloting to learn lessons from that exercise. It was agreed to keep just one LPZ in Dong Nai Province for piloting purpose. Hence an indicator for this is not needed.
•	Percentage of district extension officers received training (from 0 at baseline to 90% in Year 5)	•	Not included	DELETED The project will continue to monitor this training of extension officers internally but per suggestions at Decision Meeting that there are too many indicators in this RF, this is removed.
•	Percentage of vaccination coverage for common animal diseases (from 0 at baseline to 90% in Year 5)	•	Proportion of vaccination coverage for common diseases for animals owned by project households	REVISED Rendered more applicable by being limited to project households
•	Number of household producers in LPZs and priority production areas applying bio-security measures (from 0 at baseline to 8,500 in Year 5)	•	Not included	DELETED Included in indicators for group certification for GAHP
•	Reduction in number of disease outbreaks recorded in LPZs and priority production areas (from baseline figure to 50% in Year 5)	•	Not included	DELETED Impacts for this are embedded in the production efficiency so it is removed to reduce the number of indicators in this RF.
•	Household producers in LPZs and priority production areas applying appropriate waste treatment facilities (from 0 at baseline to 8,500 in Year 5)	•	Not included	DELETED Included in indicators for group certification for GAHP
•	Number of slaughterhouses upgraded adopting improved waste management systems (from 0 at baseline to 130 in Year 5)	•	Not included	DELETED Included in indicators for certification for GMP/ GHP/ HACCP
•	Number of meat markets upgraded adopting	•	Not included	DELETED

	improved waste management systems (from 0 at baseline to 500 in Year 5)			Repetition with similar indicator above.
•	Percentage of meat inspectors trained (from 0 at baseline to 70% in Year 5)	•	Not included	DELETED Again, removed to reduce the number of indicators.
•	Not applicable	•	Slaughterhouses supported by the project certified for GMP/ GHP/ HACCP	NEW Indicator gives more comprehensive coverage of achievement
•	Number of slaughter house and meat market inspected (from 0 at baseline to 130 slaughterhouses and 500 meat markets in Year 5)	•	Slaughter houses and meat markets inspected (slaughterhouses from 0 at baseline to 200 in Year 6 and to 350 in Year 9; meat markets from 0 at baseline to 400 in Year 6 and to 500 in year 9)	REVISED Target for slaughterhouses increased in the light of experience
Component B: Strengthening Central-level Livestock and Veterinary Services				
•	GAHP guidelines revised	•	Not included	DELETED This activity is taken up by DLP so it is removed.
•	Livestock waste recycling guidelines adopted by household producers in the project (from 0 at baseline to 8,500 in Year 5)	•	Not included	DELETED Outcome covered by waste management practices and GAHP in Component A
•	Implementation of a training program for veterinarians and meat inspectors at central, provincial, and district levels (100% of the plan in Year 5)	•	Not included	DELETED Removed to keep the number of indicators lower per suggestion at Decision Meeting.
•	Not applicable	•	Brand-name of GAHP products adopted and sustainably developed (30 brands in Year 9)	NEW Added to enable monitoring of the project's increased emphasis on marketing to increase final prices of livestock products
•	Not applicable	•	Food safety good practices included in the national veterinary curricula (curricula including food safety good practices prepared and applied by Year 8)	NEW Added to reflect the project's increasing focus on creating professional and technical capability to support livestock production.
•	Not applicable	•	Animal Breeding and Feeding Center appointed as a National Reference Center (appointment completed in Year 8)	NEW To monitor development of technical capacity for MARD's technical lab as well as a concrete target for capacity and institutional development for the AF.

Annex 2: Results Framework

Project Development Objective/ Outcome indicators	Unchanged (U) Revised (R) New (N)	Unit	Baseline (2010)	Achievement To Date	Achievement	AF Targets			Remarks
				Y5	Y6	Y7	Y8	Y9	
				2014	2015	2016	2017	2018	
1. Increase the Production Efficiency of Household-based Livestock Producers									
• Livestock mortality rates reduced	R	Per cent of pigs	15	11.8	11.8		11	10	Analysis for all households supported by the project
			41	33.2	33.2		30	29	
• Livestock fattening times shortened	R	Days for pigs	135	118	118	117	116	116	
		Days for poultry	66	58	58	58	57	56	
• Herd/ flock numbers increased	R	Number of pigs	26	31	31	33	37	40	
		Number of poultry	935	1,365	1,400	1,400	1,800	1,800	
2. Reduce the Environmental Impact of Livestock Production, Processing and Marketing									
• Households supported by the project with lessened adverse environment impacts from their production	R	Households	0	9,905	11,000	15,000	23,000	25,000	Households with improved waste disposal systems and applying good production practices
• Small slaughterhouses supported by the project with lessened adverse environmental impact from slaughtering	N	Number	0	124	175	220	270	310	Small slaughterhouses adopting environment management practices proposed by the project
• Medium and large slaughterhouses supported by the project meeting national environment standards	R	Number	0	19	25	30	35	40	
• Wet markets supported by the project meeting national environmental standards	R	Number	0	311	400	440	480	500	
3. Improve Food Safety in Livestock Product Supply Chains in Selected Provinces									
• Small slaughterhouses upgraded by the project producing meat of improving quality and safety	N	Number	0	143	175	230	310	310	Small slaughterhouses passing benchmarks for meat safety by tests of inspectors
• Medium and large supported slaughterhouses meeting national food safety standards	R	Number	0	19	25	30	35	40	
• Supported wet markets meeting national meat quality and safety standards	R	Number	0	311	400	440	480	500	
Beneficiaries	N	Number	0	105,609				135,000	Including GAHP household owners (11000), slaughterhouse owners (200), market vendors (15414), and trainees who receive training by the project (78995)
(of whom, female)		Percent	0	47.7				55	

Component/ Intermediate Indicators	Unchanged (U)	Unit	Baseline	Achievement	Achievement/	AF Targets			Remarks
	Revised (R)		(2010)	To Date	AF Baseline	Y7	Y8	Y9	
	New (N)		(2014)	Y5	Y6	(2016)	(2017)	(2018)	
Component A: Upgrading Household-based Livestock Production and Market Integration									
• Groups of livestock producer households in priority production areas having received GAHP certification	N	Number	0	0	0	300	1,000	1,200	Shift from HH-based certification to group-based certification. Groups average 20-25 HHs.
• GAHP collaborative groups/cooperatives are established and in effective operation	N	Number (groups)	0	0	0	30	70	100	
		Number (cooperatives)	0	0	0	5	10	15	
• Proportion of vaccination coverage for common diseases for animals owned by project HHs.	U	Percent of animals	0	90	90	90	90	90	
• Slaughterhouses supported by project certified for GMP/ GHP/ HACCP	N	Number	0	0		5	15	30	
• Slaughterhouses and meat markets inspected	R	Number slaughterhouses	0	143	200	260	350	350	
	R	Number meat markets	0		400	440	480	500	
Component B: Strengthening Central-level Livestock and Veterinary Services									
• Brand-name of GAHP products adopted and sustainably developed	N	Number of brands	0	0	0	5	20	30	
• Food safety good practices included in the national veterinary curriculum	N	Yes/ no	No	No	No	No	Yes	Yes	
• Animal Breeding and Feeding Center appointed National Reference Center	N	Yes/ no	No	No	No	No	Yes	Yes	