

7300256

REPORT U-446
 73-992-6113

PROJECT APPRAISAL REPORT (PAR)

1. PROJECT NO. 73-992-6113	2. PAR FOR PERIOD: Feb '72 TO Mar '73	3. COUNTRY VIETNAM	4. PAR SERIAL NO. 730-73-044
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5. PROJECT TITLE
 Animal Production (Livestock/Livestock Products)

6. PROJECT DURATION: Began FY 67 Ends FY 75	7. DATE LATEST PROP -	8. DATE LATEST PIP -	9. DATE PRIOR PAR 3-9-72
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10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: \$4,623,000	b. Current FY Estimated Budget: \$206,000	c. Estimated Budget to completion After Current FY: \$
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11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)	
a. NAME USDA (Two Livestock Advisors)	b. CONTRACT, PASA OR VOL. AG. NO. FE 66-67

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X)			B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
U.S. A.I.D.	A.I.D./W	HOST		
			<p><u>Problem:</u></p> <p>A continuous flow of reliable livestock production data is needed. (See page 6 of the PAR for full discussion) The Directorate of Agricultural Economics (DAE) has the responsibility for reporting, among other things, on the livestock industry. The Directorate of Animal Health and Production, through its animal protection and abattoir control services, collects some data on a continuous basis, e.g., recorded slaughter. More useful and reliable data could be obtained with less duplication of effort through improved coordination between these two Directorates.</p> <p><u>Action:</u></p> <p>ADFA/PROD and ADFA/ECON to explore prospects for and facilitate closer coordination between DAE and DAH in order to develop more useful and reliable livestock data through improved collection, tabulation and analysis.</p> <p>R. Gleason, A/ADFA <i>R/G</i> Date <u>8-23-73</u> C. Seckinger, ADFA/PROD <i>CS</i> Date <u>7-1-73</u> G. McLeroy, ADFA/PROD <i>GM</i> Date <u>2-14-73</u> E. Kanrich, ADPROG <i>EK</i> Date <u>8-24-73</u> O. Lustig, PROG/EVAL <i>OL</i> Date <u>8-7-73</u></p>	

D. REPLANNING REQUIRES REVISED OR NEW:	<input type="checkbox"/> PROP	<input type="checkbox"/> PIP	<input checked="" type="checkbox"/> PROAG	<input type="checkbox"/> PIO/T	<input type="checkbox"/> PIO/C	<input type="checkbox"/> PIO/P	E. DATE REVIEW PANEL MET 6/12/73
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PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE Richard L. Hughes, Livestock Advisor	MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE John P. Robinson, DIR
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II. PERFORMANCE OF KEY INPUTS AND ACTION AGENTS

A. INPUT OR ACTION AGENT CONTRACTOR, PARTICIPATING AGENCY OR VOLUNTARY AGENCY	B. PERFORMANCE AGAINST PLAN							C. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE (X)					
	UNSATIS- FACTORY		SATISFACTORY			OUT- STANDING		LOW	MEDIUM			HIGH	
	1	2	3	4	5	6	7	1	2	3	4	5	
1. USDA (FE 66-67)						X							X
2.													
3.													

Comment on key factors determining rating Technicians' technical competence, understanding of project purpose and personal initiative and motivation continue to be outstanding. Area Advisor in livestock and poultry counterparts An. Hus. Chiefs in eight provinces; advises producer association membership, e.g., group meetings, seminars, individual advice.

Project Manager for National Livestock Training Center. Advising GVN counterpart during actual construction phase, participant training aspect and establishment of foundation breeding flocks and herds.

4. PARTICIPANT TRAINING						X								X
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Comment on key factors determining rating

Four returned participants fully employed in technical and management positions resulting in notable improvement in implementation of project activities. Two returned participants (FY 72) not fully employed as Feed Lab Technicians because physical facilities not completed (facilities expected to be completed mid-1973).

5. COMMODITIES						X							X	
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Comment on key factors determining rating

Use of commodities generally satisfactory. Equipment and supplies for NLTC and Feeds Laboratory now being installed for use beginning May 1973.

6. COOPERATING COUNTRY	a. PERSONNEL					X								X
	b. OTHER					X							X	

Comment on key factors determining rating Performance generally good and steadily improving. Problems continue but are being solved more readily with addition of a number of competent project managers with technical and administrative skills. Pay and allowance continue to be inadequate. Availability of province staff is adequate and level of competency improving (e.g., in-service training, seminars, short courses, etc.).

OTHER FACTORS: Cooperation with producer organizations is satisfactory but greater effort needed to encourage private sector in spearheading speed of improved production technology. Availability and accuracy of production data, and statistics inadequate but improving.

7. OTHER DONORS														
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Comment on key factors determining rating of Other Donors

The West German Government has provided a grant for equipping a modern slaughter facility in the Saigon/Gia Dinh area. Construction of the slaughterhouse by MOE began in 1971 and is expected to be completed in July 1973. Recent construction progress very satisfactory.

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III.B. KEY OUTPUT INDICATORS AND TARGETS - QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
1. Established sources of purebred breeding stock in the country. About 1,000 breeder swine.	1. Distribution of more than 1,000 breeder swine imported in years 1969 & 1972, about 150 producers. About 6,000 purebred pigs produced in 1970. Commercially produced meat-type butcher hog increasing from about 3% in 1969 to 10% end of CY 1972. Area of improved germ plasma expanding - more crossbreeding being practiced.
2. Established purebred swine recording associations. (New Output)	2. No purebred swine recording system has been established. Recording system essential for greater dissemination of breeding stock. Partial lists of individual producers established by agri-business sector to identify kind, location and availability of breeder swine.
3. Establish sources of improved poultry breeding stock in the country.	3. 258,000 parent stock replacements under CIP in 1972 for all 4 regions. Maximum annual hatching capacity in all 4 regions about 28 million eggs in 1972. Expansion occurring in Saigon area, slower to develop in CGs 1, 2; good progress in CG 4.
4. Plan and recommend technical inputs to poultry industry. Major emphasis outside Saigon areas.	4.1 Poultry production and management seminars - three days each in four regions - held for about 500 commercial operators, farmers and GVN technicians and cadre. 4.2 Provided advisory assistance to poultry producers in selection, installation and operation of production equipment such as incubators and automatic watering systems for general plant expansions.
5. Plan and recommend technical inputs to livestock training courses conducted by consultants and regional advisors. Major emphasis outside Saigon areas.	5.1 Two-day Swine Management Seminars held in four regions for about 400 producers, GVN technicians and cadre. 5.2 On farm visits to 28 operators producing purebred swine.

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III.B. KEY OUTPUT INDICATORS AND TARGETS - QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
	5.3 US regional advisors met with 600-700 farmers and producers association members on production-management practices.
	5.4 US advisors conducted feed comparison trials and conducted three-day carcass evaluation seminar.
6. Advise producer association in planning, managing and operations.	6.1 Producer associations (poultry/swine) organized in all four regions.
	6.2 Poultry processing plant operating in Cantho.
7. Assist feed mill industry with recommendations on site location, equipment selection, installation and operation.	7.1 This activity has essentially achieved its target in CG 3. Grant funded CVT mills in Danang, Qui Nhon and Nha Trang are in operation. US advisors provided technical inputs in establishing operations and feed formulation.
	7.2 Two mills installed improved processing equipment purchased through CIP program.
8. National Livestock Training Center facilities constructed.	8. Construction now under way. Expect to begin installing equipment and other start-up procedures by the end of May 1973. Ninety-five percent of the equipment in-country; installation of all equipment scheduled for completion by First Quarter CY 74. Director (with MS degree) and other senior staff designated. Assistant Director designated departed December 1972 for MS degree training in US; substitute replacement available. Purebred swine and purebred chickens from the US to stock Center are on order.

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III.B. KEY OUTPUT INDICATORS AND TARGETS - QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
9. National Livestock Training Center Feed Laboratory established and operating.	9. Construction same as 8.1 above. Lab equipment procurement 75% complete. Designated lab superintendent returned from US with MS degree in animal nutrition September 1972. Of four technicians to be assigned to the lab, two already trained and the remaining two for US training in 1974. Arrangements made for US specialist TDY to assist in placing lab into operation.
10. Develop provincial abattoir designs and operational procedures. (New Output)	10. Plans developed for province municipal and smaller abattoirs. GVN identified in reconstruction plan as priority activity.
11. Established and promoted the use of slaughter swine classes and grades. (New Output) (See note next page)	11.1 33,586 head of slaughter swine classified and graded at selected abattoirs in August-Sept. 1972, as the basis for developing standards.
	11.2 Standard classes and grades, and required recording form developed.
	11.3 Classification data used by GVN to make slaughter swine supply projection.

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III.B. KEY OUTPUT INDICATORS AND TARGETS - QUALITATIVE				
1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS			2. COMMENT	

NOTE:

The present lack of precise swine production data needed to gauge progress in improvement efforts, make supply projections, and provide a base for a market news service, can be easily corrected through the collection of standard classes and grades information on market swine at the point of slaughter. These data include determinations on age, weight, sex, breed-type and relative grade of slaughter offtake. By applying the principle of population dynamics to the collected data, it is possible to make projections relative to future butcher hog supplies or work backward to determinations respecting composition of the national swine herd.

Information has broad application at the national and producer level to:

- (a) make national determinations at which point exports can begin;
- (b) promote marketing efficiency through utilization of grades and standards;
- (c) determine extent to which disease control programs are working;
- (d) determine rate of genetic improvement in national herd; and
- (e) expand market news reporting.

The implementation of recording classes and grades at the point of slaughter will first require appreciation of the value of the concept, and establishment of responsibility for data collection. Thereafter, necessary forms would have to be printed and a short period of instruction given to recorders.

The Directorate of Animal Production and Health, with responsibility for abattoir supervision, could best handle data collection, but the Directorate of Agricultural Economics would be better qualified to handle details of data processing.

In addition to the need for collecting information at the point of slaughter, other production statistics and factual details about the national swine herd are also of paramount importance. Since data collection is expensive at best in terms of both manpower and required financial expenditures, duplication of effort should be avoided to the extent possible. For example, although the Directorate of Agricultural Economics has responsibility for conducting surveys respecting swine, the directorate of Animal Health and Production is charge with animal health protection which includes mounting vaccination campaigns throughout the country. With improved coordination and cooperation between DAE and DAH, precise information on the national swine herd could be easily obtained in connection with routine vaccination campaigns.

IV. PROJECT PURPOSE

A. 1. Statement of purpose as currently envisaged.

2. Same as in PROP? YES NO

To increase production of livestock with emphasis on poultry eggs and pork to meet consumer demand at prices commensurate with consumer purchasing power and production costs.

B. 1. Conditions which will exist when above purpose is achieved.	2. Evidence to date of progress toward these conditions.																								
<p>1. Reasonable retail prices under conditions of: (a) negligible imports of livestock products; and (b) no subsidization of producer inputs.</p>																									
<u>Indicators:</u>	<u>Progress to date:</u>																								
<p>1.1 (a) Saigon retail prices in piasters (1968-72)</p> <p>Eggs/doz Chicken/lb Pork loin/lb</p>	<table border="1"> <tr> <td>1.1 (a)</td> <td><u>1968</u></td> <td><u>1969</u></td> <td><u>1970</u></td> <td><u>1971</u></td> <td><u>1972</u></td> </tr> <tr> <td></td> <td>178</td> <td>192</td> <td>312</td> <td>222</td> <td>323</td> </tr> <tr> <td></td> <td></td> <td>155</td> <td>188</td> <td>193</td> <td>225</td> </tr> <tr> <td></td> <td></td> <td>218</td> <td>317</td> <td>295</td> <td>456</td> </tr> </table>	1.1 (a)	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>		178	192	312	222	323			155	188	193	225			218	317	295	456
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<p>1.1 (b) Price comparisons by region in piasters (1972)</p> <p>Eggs/doz Chicken/lb Pork loin/lb</p>	<table border="1"> <tr> <td rowspan="2">1.1 (b)</td> <td rowspan="2"><u>West</u></td> <td rowspan="2"><u>East</u></td> <td colspan="2"><u>Central</u></td> </tr> <tr> <td><u>Lowland</u></td> <td><u>Highland</u></td> </tr> <tr> <td></td> <td>272</td> <td>327</td> <td>295</td> <td>322</td> </tr> <tr> <td></td> <td>266</td> <td>329</td> <td>318</td> <td>325</td> </tr> <tr> <td></td> <td>387</td> <td>494</td> <td>398</td> <td>425</td> </tr> </table>	1.1 (b)	<u>West</u>	<u>East</u>	<u>Central</u>		<u>Lowland</u>	<u>Highland</u>		272	327	295	322		266	329	318	325		387	494	398	425		
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<p>1.1 (c) Estimated US prices of eggs, pork and broilers (1972)</p>	<table border="1"> <tr> <td>1.1 (c)</td> <td>Eggs/doz</td> <td>\$0.68</td> </tr> <tr> <td></td> <td>Chicken/lb</td> <td>0.55</td> </tr> <tr> <td></td> <td>Pork/lb</td> <td>0.99</td> </tr> </table>	1.1 (c)	Eggs/doz	\$0.68		Chicken/lb	0.55		Pork/lb	0.99															
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<p>1.2 Saigon retail price changes for live chickens, eggs and pork in 1972 compared with other food stuffs (1971=100)</p> <p>Live Chicken Chicken eggs Pork All foods</p>	<table border="1"> <tr> <td>1.2</td> <td><u>January</u></td> <td><u>October</u></td> <td><u>% Change</u></td> </tr> <tr> <td></td> <td>102</td> <td>115</td> <td>13.7</td> </tr> <tr> <td></td> <td>92</td> <td>160</td> <td>73.9</td> </tr> <tr> <td></td> <td>99</td> <td>126</td> <td>27.3</td> </tr> <tr> <td></td> <td>113</td> <td>144</td> <td>27.4</td> </tr> </table>	1.2	<u>January</u>	<u>October</u>	<u>% Change</u>		102	115	13.7		92	160	73.9		99	126	27.3		113	144	27.4				
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	<p>The retail price of chicken eggs increased at a much faster rate in 1972 than food stuffs in general; whereas, the price increases for live chickens and pork were equal to or below that for general food stuffs. This indicates that poultry and swine products were reasonably priced.</p>																								

B. 1. Conditions which will exist above purpose is achieved	2. Evidence to date of progress toward these conditions.					
(Cont'd)						
1.3 Negligible imports of livestock products:	1.3 Excluding ARVN purchases of processed field rations, imports of livestock products were as follows:					
	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	
Broiler chicks (000)	3,700	3,600	4,100	-	-	
Layer chicks (000)	207	936	478	146	-	
Meat/poultry (MT)	2,537	2,701	6,056	2,498	1,091	
1.4 Subsidization of producer inputs.	1.4 Producers' inputs are still being subsidized through CIP procurement of parent breeder stock, industrial equipment, and protein supplements. Title I feed grain (corn) imports increased from 68,000 MT in CY 1971 to 100,000 MT in CY 1972.					
2. Production facilities for eggs, poultry and swine minimally established.						
2.1 Table egg capacity (millions) (Saigon area target: 200 million/year)	2.1	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
		136	168	581	614	790
2.2 Hatchery capacity, day-old chick targets (millions) Saigon area (18 million/yr) CGs 1-2 (2 million/yr) CG 4 (2 million/yr)	2.2	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
		0.5	7	12	15.6	24.0
					3.3	3.5
					0.4	0.5
2.3 Broiler capacity (millions) (Saigon area target: 14 million/year) Saigon area	2.3	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
		2.5	5.5	11	12	14
2.4 Swine facilities Purebred producers (15-100sows) (Target: 10) Purebred producers (1-15 sows) (Target: about 40) Purebred breeder pigs/yr* (000) (Target: 40,000) Good grade breeder pigs/yr*(000)	2.4	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
		4	6	6	12-15	20
		3	43	44	50-70	200
						8-9
						30

* Estimates of purebred and grade pigs produced in 1972 are based on 1,000 purebred and 4,000 crossbred breeding females x 1.5 farrowings/yr x average of 7 pigs weaned per litter (Vietnam importation of breeder swine in 1969, 1972 and some imported in the years 1950-1960).

B. 1. Conditions which will exist above purpose is achieved.	2. Evidence to date of progress toward these conditions.																																																										
(cont'd)																																																											
3. Total swine population increased.																																																											
3.1 <table border="0" style="display: inline-table; vertical-align: top;"> <tr> <td></td> <td style="text-align: center;"><u>Target</u></td> </tr> <tr> <td>Total swine pop.</td> <td style="text-align: center;">(5 million)</td> </tr> <tr> <td>% breeder females</td> <td style="text-align: center;">(12-15)</td> </tr> <tr> <td>Farrowings/year/sow</td> <td style="text-align: center;">(1.6)</td> </tr> <tr> <td>Mortality rates (%):</td> <td></td> </tr> <tr> <td> Birth to weaning</td> <td style="text-align: center;">(27)</td> </tr> <tr> <td> Adult</td> <td style="text-align: center;">(3)</td> </tr> <tr> <td>Slaughter offtake(%)</td> <td style="text-align: center;">(82)</td> </tr> </table>		<u>Target</u>	Total swine pop.	(5 million)	% breeder females	(12-15)	Farrowings/year/sow	(1.6)	Mortality rates (%):		Birth to weaning	(27)	Adult	(3)	Slaughter offtake(%)	(82)	3.1 <table border="0" style="display: inline-table; vertical-align: top;"> <tr> <td></td> <td style="text-align: center;"><u>1968</u></td> <td style="text-align: center;"><u>1969</u></td> <td style="text-align: center;"><u>1970</u></td> <td style="text-align: center;"><u>1971</u></td> <td style="text-align: center;"><u>1972</u></td> </tr> <tr> <td></td> <td style="text-align: center;">3.6</td> <td style="text-align: center;">3.8</td> <td style="text-align: center;">4.0*</td> <td style="text-align: center;">4.3*</td> <td style="text-align: center;">4.0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">12</td> <td style="text-align: center;">12</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">1.4</td> <td style="text-align: center;">1.4</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">35</td> <td style="text-align: center;">32</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">3.5</td> <td style="text-align: center;">3.0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">73</td> </tr> </table>		<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>		3.6	3.8	4.0*	4.3*	4.0					12	12					1.4	1.4					35	32					3.5	3.0						73
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* Revised estimates (market grades and slaughter facilities - October 1972)	slaughter classification study at selected DAH/DAE).																																																										
3.2 Commercially produced meat-type butcher hogs will increase from 3% in 1968 to 12% in 1975, and have a 30% higher slaughter weight as compared to traditional animals.	3.2																																																										
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5.1 National Livestock Training Center providing continuing training of farmers, technicians, cadre and NAC students. Class facilities for 100, with annual attendance of 1,000.	5.1 Training programs scheduled to begin Spring 1974. (See Output 8)																																																										

B. 1. Conditions which will exist above purpose is achieved.	2. Evidence to date of progress toward these conditions.
(Cont'd)	
5.2 NLTC Feed Laboratory: (a) Capability in conducting quality control testing for commercially prepared livestock and poultry feeds. (b) Capability in providing technical services to private sector in formulating balanced rations. (c) Capability in training technicians and NAC students. (d) Capability in conducting adaptive research on least-cost balanced rations, with emphasis on domestically produced ingredients.	5.2 NLTC Feed Laboratory: (Operations scheduled to begin end CY 1973) No progress to date.
5.3 Professionally staffed field service in each of the provinces and autonomous cities providing needed information and services.	5.3 Staff assigned. For most part, capabilities satisfactory to good, but upgrading still needed.
6. Producer associations adequately providing needed support services to members.	6. Producer membership organized in four regions. Joint importation and distribution of breeder stock and other inputs continue to be common practice. In addition, the associations have organized and financed livestock and poultry exhibits in connection with National Farmers' Commemoration Day, published and distributed educational materials, cooperated in a government vaccine testing program by supplying pigs to NIB, and were an important influence on GVN policy to stabilize the price of feed corn during 1971.
7. Purebred swine registries providing recording service.	7. No Vietnamese registration system or organization established. Some breeders are keeping records.

PAGE <u>11</u> OF <u>11</u> PAGES	PROJECT NO. 730-11-130-315.02	PAR FOR PERIOD ENDING March 1973	COUNTRY Vietnam	PAR SERIAL NO. 730-73-744
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V. PROGRAMMING GOAL

A. Statement of Programming Goal

Increase agriculture production to earn and save foreign exchange, increase and equitably distribute rural income and provide an adequate diet for the people of Vietnam.

B. Will the achievement of the project purpose make a significant contribution to the programming goal, given the magnitude of the national problem? Explain.

Through increasing use of improved meat-type animals that possess well over 33% greater productive efficiency, as compared to traditional fat-type animals, the swine industry has been able to keep pace with effective urban consumer demand. At the same time, the new meat-type pig yields a carcass that surpasses export requirements in Southeast Asia. The endemic nature of existing Foot and Mouth Disease will for some time preclude the export of fresh pork to countries free of this disease.

At the small-holder level, the ready availability of improved breeding stock and other aspects of modern technology, now allows the intensive care of swine. This provides productive use of otherwise unemployable labor, salvage of waste feedstuffs, manure for vegetables, fruit trees and food crops, generally increases farm investment, and permits the slaughter of 1-2 pigs annually for home consumption.

The impact of poultry on the programming goal is somewhat different from that of swine. That is, in poultry the pattern that has evolved is large commercial operations directed at supplying urban demand. At the same time, small backyard flocks have proliferated in and about the larger towns. In the first instance, a complete package of modern technology is employed up to the point of marketing. With respect to small-holders, improved breeds are being kept in increasing numbers, and good management practices followed, but formulated feeds are used as a supplement to available traditional feed supplies. The two types of producers have been able to meet the effective demand for table eggs and poultry meat in most urban markets.

Poultry development has lagged in rural areas for a number of reasons: (a) major development inputs were early directed at secure urban areas; (b) lack of effective demand for poultry products in rural areas; (c) the traditional village bird forages for much of its daily sustenance and does not compete seriously with swine for limited feed supplies; and (d) improved poultry breeds that require higher levels of technology to survive, have not apparently appealed to the traditional farmer.

**PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK**

Life of Project:
From FY 1967 to FY 1976
Total U. S. Funding _____
Date Prepared: _____

Project Title & Number: ANIMAL PRODUCTION (Livestock) 730-11-130-315.02

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																																																																																			
<p>Program or Sector Goal: The broader objective to which this project contributes: Increase agriculture production to earn and save foreign exchange, increase and equitably distribute rural income and provide an adequate diet for the people of Vietnam.</p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> 1. Import reductions in certain livestock and livestock products. 2. Export increases in livestock and livestock products. 3. Increased domestic consumption per capita of livestock and livestock products. 4. Increased rural income as result of increased livestock enterprises. 	<ol style="list-style-type: none"> 1. Analysis of agricultural production and marketing statistics for livestock and livestock products. 2. Analysis of statistical data on farm income and price-cost disparity. 3. Product elasticity studies. 4. Cost/benefit studies of livestock enterprises. 	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. GVN Ministry of Economy and ARVN curtail imports of frozen and processed livestock products and vegetable oils. 2. General economic development with associated increased purchasing power will combine with further urbanization to assure a demand for local food products of animal origin. 3. Marketing information and infrastructure development will keep pace with <u>improvements in other phases of production.</u> 																																																																																																			
<p>Project Purpose:</p> <p>To increase production of livestock with emphasis on poultry, eggs and pork to meet consumer demand at prices commensurate with consumer purchasing power and production costs.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. Negligible imports of poultry, eggs and pork with domestic production at reasonable prices. 2. Production hatching facilities for poultry at 20 million chicks/yr, 14 million broilers, 200 million eggs and swine population of 5.0 million. 3. GVN capability provide training, support field industry and producer associations (#4 next page) 	<ol style="list-style-type: none"> 1.0 AESS statistical outputs. 1.1 Import statistics. 2.0 Field visits and Ministry reports. 2.1 Private sector reports. 2.2 Prov. animal husbandry reports. 2.3 Producer association reports. 3.0 NLTC teaching plans. 3.1 Ministry performance in support of private sector. 4.0 Analysis of slaughter swine classification and grading data collected at selected points of slaughter. 	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. That marketing information will be developed. 2. That in-country production of feed grains and protein supplements be increased (see Proj. 730-314 - Crop Production). 3. Required feedstuffs will be available either through imports or from local origin to support increased swine and poultry production. <p style="text-align: right;">(#4 next page)</p>																																																																																																			
<p>Outputs:</p> <ol style="list-style-type: none"> 1. Plan and provide recommendations to feeder mill operators to increase capacity. 2. Plan and provide recommendations to livestock producers associations, and poultry producers. 3. Establish training facilities for cadre and producers. 4. Establish sources of purebred swine and improved poultry. 5. Plan and recommend technical inputs to poultry industry (#6 next page) 	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> 1. Recommend plans, specifications, site locations, etc., to feed millers. 2. Recommend procedural and policy guidelines to producer associations. 3. Evaluate and recommend plans for training programs. 4. Provide improved stock to selected breeders. 5. Provide technical assistance in poultry management. <p style="text-align: right;">(#6 next page)</p>	<p>1. Evaluation of operational units in Vietnam.</p> <ol style="list-style-type: none"> 2. Evaluate effectiveness of producer associations in meeting needs of members. 3. Observe performance standards of trainers and trainees. 4. Improved stock cared for and available to farmers for purchase. 5. Improved breeding animals in hands of producers and on the market. 	<p>Assumptions for achieving outputs:</p>																																																																																																			
<p>Inputs:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Project 315</th> <th colspan="3">Implementation Target (Type and Quantity)</th> <th colspan="2">GVN (VN\$ MILLIONS)</th> <th colspan="2">Project 315</th> </tr> <tr> <th>US</th> <th>CUMS</th> <th colspan="3">Sub-project 315.02</th> <th colspan="2">CUMS</th> <th></th> <th></th> </tr> <tr> <th>Personnel (MM/000)</th> <th>6/30/72</th> <th></th> <th>FY 73</th> <th>FY 74</th> <th>FY 75</th> <th>12/30/72</th> <th>CY 73</th> <th>CY 74</th> <th>CY 75</th> </tr> </thead> <tbody> <tr> <td>Direct Hire</td> <td>1,596</td> <td></td> <td>36/102</td> <td>48/142</td> <td>36/110</td> <td>GVN Reg Budget</td> <td>655</td> <td>160.0</td> <td>170.0</td> </tr> <tr> <td>PASA/Cont.</td> <td>1,841</td> <td></td> <td>24/67</td> <td>24/72</td> <td>12/38</td> <td>AAC</td> <td>128</td> <td>54.0</td> <td>15.0</td> </tr> <tr> <td>Participants (#/000)</td> <td>411</td> <td></td> <td>1/7</td> <td>5/39</td> <td>4/30</td> <td>GVN Special Budgets</td> <td>165</td> <td>104.0</td> <td></td> </tr> <tr> <td>Commodities (000)</td> <td>781</td> <td></td> <td>28</td> <td>15</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other costs</td> <td>4</td> <td></td> <td>2</td> <td>3</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>4,623</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TOTAL</td> <td></td> <td></td> <td>206</td> <td>271</td> <td>186</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Project 315		Implementation Target (Type and Quantity)			GVN (VN\$ MILLIONS)		Project 315		US	CUMS	Sub-project 315.02			CUMS				Personnel (MM/000)	6/30/72		FY 73	FY 74	FY 75	12/30/72	CY 73	CY 74	CY 75	Direct Hire	1,596		36/102	48/142	36/110	GVN Reg Budget	655	160.0	170.0	PASA/Cont.	1,841		24/67	24/72	12/38	AAC	128	54.0	15.0	Participants (#/000)	411		1/7	5/39	4/30	GVN Special Budgets	165	104.0		Commodities (000)	781		28	15	5					Other costs	4		2	3	3						4,623									TOTAL			206	271	186							<p>Assumptions for providing inputs:</p>
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<p>Project Purpose:</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <p>4. Commercially produced meat-type butcher, hogs will increase from 3% in 1968 to 12% in 1975; have a 30% higher slaughter weight and command premium of 2-3 cents per pound liveweight as compared to traditional animals.</p>		<p>Assumptions for achieving purpose:</p> <p>4. Vaccines, diagnostic service and trained cadre will be available to guard animal health.</p>
<p>Outputs:</p> <p>6. Develop provincial abattoir design and operational procedures. 7. Formulate and promote the use of slaughter swine classes and grades</p>	<p>Magnitude of Outputs:</p> <p>6. Provide plans and procedures. 7. Classification and grading done at 10 selected abattoirs on continuing basis.</p>		<p>Assumptions for achieving outputs:</p>
<p>Inputs:</p>	<p>Implementation Target (Type and Quantity)</p>		<p>Assumptions for providing inputs:</p>