MOA logo

Project Profile

# *Modernization of the Veterinary Services Division*
# *Ministry of Agriculture and Lands*
# *Jamaica*

12 of March, 2008

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## Acronyms and Abbreviations

| | |
|---|---|
| CASE | College of Agriculture, Science and Education |
| FAO | Food and Agriculture Organization of the United Nations |
| GOJ | Government of Jamaica |
| GNP | Gross National Product |
| IICA | Inter-American Institute for Cooperation on Agriculture |
| MOAL | Ministry of Agriculture and Lands |
| OIE | World Animal Health Organization |
| PIU | Project Implementation Unit |
| PMC | Project Management Committee |
| PVS | Performance, Vision, Strategy |
| SPS | Sanitary and Phytosanitary Measures |
| VPH | Veterinary Public Health |
| VSD | Veterinary Services Division |
| WTO | World Trade Organization |

## Foreword

The Inter-American Institute for Cooperation on Agriculture (IICA) presents its compliments to the Ministry of Agriculture and Lands and is pleased to present the project proposal for the Modernization of the Veterinary Services Division (VSD).

IICA has been a major partner in the process from the inception when at the invitation of the Ministry of Agriculture and Lands an assessment of the VSD was conducted by IICA along with an evaluation of the Veterinary Services by the World Animal Health Organization (OIE). Recommendations from these two studies form the basis for the current proposal which IICA has been requested to prepare.

The proposal hereby presented is ambitious in its objectives, however feasible, and requires full support from the political directorate of the Government of Jamaica as well as strong and visionary leadership within the VSD in order to be successfully implemented.

IICA stands ready to provide any further support to the process that is within its capacity.

On behalf of the IICA project preparation team, Hector Medina-Castro and Carol Thomas, I wish to express appreciation to the staff of the VSD for their invaluable support and input. In particular, we wish to thank Dr. Osbil Watson, Dr. George Grant, Dr. Candice Phipps, Mrs. Claudette Phipps and Ms. Tricia Fraser for their dedication and for going the 'extra mile'.

I wish the Ministry every success in this endeavour and pledge IICA's ongoing commitment of partnership with the Ministry of Agriculture and Lands for the advancement of agriculture in Jamaica.

Cynthia Currie
IICA Representative in Jamaica

## I. Executive Summary

1.1. Globalization, climate change and obligations under international trade agreements such as the World Trade Organization Agreement on the application of Sanitary and Phytosanitary Measures (WTO SPS Agreement) have resulted in countries seeking to continuously improve their agricultural health systems.

1.2. In this context, at the request of the Ministry of Agriculture and Lands, an extensive evaluation of the VSD was conducted. This activity was carried out separately by the World Animal Health Organization (OIE) and the Inter-American Institute for Cooperation on Agriculture (IICA) with each agency focusing on different aspects of the operation of the Veterinary Services Division (VSD). The OIE's evaluation focused on the technical areas of the veterinary services while the focus of the assessment conducted by IICA was on the areas of management, organizational structure, staff and customer service delivery. The present proposed project for the Modernization of the VSD is based on recommendations resulting from these two studies.

1.3. The OIE evaluation was conducted using the Performance, Vision, Strategy (PVS) instrument developed jointly by IICA and OIE and latter transformed by OIE into its own evaluation tool. The main objective of this evaluation was to determine the status of the Veterinary Services, its strength and weaknesses and to make recommendation for improvement. These include increasing the number of veterinary and other professionals, technical and support personnel, increasing interaction with the private sector, increasing institutional capabilities through continuous training of the VSD personnel, the establishment of an Epidemiology Unit, implementing epidemiological surveillance programmes, substantial improvement of the laboratory capacity and services and incorporating the relevant functions of Veterinary Public Health into the VSD thus creating a single entity responsible for all veterinary services.

1.4. The IICA evaluation reviewed the operation and management of the VSD and furnished recommendations with respect to a new organizational structure. This new structure covers areas such as increase in the cadre of staff at all levels, the restructuring and de-centralization of the operations of the VSD in order to provide much need services such as island-wide veterinary clinical care, improved laboratory services, improved customer service delivery and provision for training and staff mobility.

1.5. The proposed project for the Modernization of Jamaica's Veterinary Services Division has incorporated the recommendations of the studies conducted by the OIE and IICA. The final outcome expected from the

implementation of the project is the transformation of the VSD into one that will deliver effective and efficient veterinary services to all stakeholders through the implementation of a new organizational structure focusing on personnel development and capacity building, customer service, disease surveillance, quarantine and laboratory services, infrastructure and equipment improvement and the provision of clinical and advisory services to farmers.

1.6. The main objective of the project is to improve and strengthen the capability and capacity of the VSD in the delivery of veterinary services in order to maintain a healthy animal population, enhance public health, food safety and security, facilitate trade and safeguard animal welfare.

1.7. The project will be implemented over the entire island with activities divided into three geographic regions to cover all fourteen parishes of the country. The beneficiaries will be (i) producers of livestock and animal products, (ii) processors, (iii) producer associations (iv) marketers and traders of animals and animal products, (v) importers and exporters of animals and animal products (vi) consumers and (vii) VSD staff.

1.8. The proposed project consists of four components, namely: (i) Implementation of a New Organizational Structure, (ii) Development of Technical Capabilities (Training), (iii) Renovation of Infrastructure and Procurement of Equipment and (iv) Delivery of Veterinary (Field) Services. These four components are designed to meet the objectives of the project.

1.9. The first component is designed to put into operation a new structure for the VSD by developing and implementing institutional arrangements that focus on imports & exports, customer service, disease surveillance and veterinary public health.

1.10. The second component addresses the increase of capacity and capability (as well as effectiveness and efficiency) of the VSD by implementing a training programme for continuing education for all categories of staff, which covers several fields of theoretical and practical knowledge.

1.11. In order to deliver efficient and high quality veterinary services efficiently to all stakeholders, the third component focuses on the renovation of the infrastructure and procurement of equipment to include the main laboratories, the clinical complexes and residences, the Quarantine station and the artificial insemination facilities.

1.12. The final component addresses the provision of more efficient field services to farmers and other stakeholders. This component complements

the other three components, since it involves the design and implementation of new or improved programmes, hiring and training relevant personnel, restoring facilities and upgrading and acquiring equipment to operate the facilities effectively and efficiently.

1.13. It is recommended that a Project Implementation Unit (PIU) be established within the VSD for effective execution of the project. The PIU should consist of a project manager (a consultant), an assistant and a secretary. The function of the PIU will be to manage and monitor the execution of the project, under the supervision of the Director of the VSD. It is also recommended that a Project Management Committee (PMC) be formed to provide general oversight of the project. The PMC should include representatives from all the relevant Ministries, livestock associations, exporters and importers, producers, NGOs and other relevant stakeholders.

1.14. Taking into account the extent of the modernization of the VSD that is proposed, the schedule of activities for the project will cover a period of five years.

1.15. The Budget of the project to be implemented over a five-year period is presented in Table 3. The estimated total is US$ 6,843,533. The incremental cost of personnel to be hired is US$ 1,571,069 and represents 23% of the total cost of the project. The cost of implementing the training programme for all levels of staff is US$ 511,527 (7.5%. of total cost). Renovation of infrastructure and procurement of equipment (other than for field services) amounts to US$ 2,972,092 (44% of total cost) while the renovation of infrastructure and procurement of equipment for field services total US$ 497,142 (7% of total cost). A sum of US$ 467,500 is allocated to the Project Implementation Unit (7% of total cost). Finally, an amount of US$ 684,203 (10% of total cost) is allocated for contingencies. (In section A.3.2 information used in the calculation of the budget is presented).

## II. Background and Justification

2.1. Globalization, climate change and obligations under international trade agreements such as the World Trade Organization Agreement on the application of Sanitary and Phytosanitary Measures (WTO SPS Agreement) have resulted in countries seeking to continuously improve their agricultural health systems. A good agricultural health system enhances a country’s ability to access markets for exports –which spurs economic growth- and to maintain credibility and leadership in these markets. At the same time, a good agricultural health system helps to protect the health and well-being of humans, animals and plants and ensures that the country is protected from the introduction and

establishment of harmful pests and diseases that have the potential of adversely affecting agriculture

2.2. An important area of agricultural health is the country's veterinary service and systems. To be effective, the national veterinary service should possess the technical, scientific, administrative and human capacity and the infrastructural resources necessary to operate at levels that ensure that the country meets its obligations both to its international trading partners and its local consumers and stakeholders.

2.3. It is against this background that an evaluation of the Veterinary Services Division (VSD) of the Ministry of Agriculture and Lands (MOAL) of Jamaica was conducted by the World Animal Health Organization (OIE) and subsequently the Inter-American Institute for Cooperation on Agriculture (IICA) conducted a complementary study about the organizational structure of the VSD.

## A. Government Policy on Agriculture

2.4. In 2001, the Government of Jamaica (GOJ) promulgated an Agricultural Policy Framework for the period 2001-2004, which included policies on agricultural trade, agricultural support services, support of critical sub-sectors and rural development.

2.5. In 2007, the policy priorities of the GOJ for the Agricultural and Rural sectors were redefined in order for the Agricultural Policy to achieve a comprehensive framework for rural and agricultural development, to promote investment, job creation and rural prosperity. Other policy development initiatives related to Agricultural Health and Food Safety are being incorporated in this comprehensive policy framework that seeks to:

- Implement programmes that promote high standards of food hygiene while maintaining systems of surveillance and control that will ensure compliance

- Safeguard and improve the health and quality of commercially produced plants and plant products

- Cover issues that will raise the health status and condition of animals, promote food safety and disease prevention among the human population, provide animal health services which will satisfy international trade requirements and upgrade legislation on the control of animal diseases and their effects on the human population.

## B. The Livestock Sub-sector

2.6. Jamaica has a total area of 10,991 $km^2$ and is located in the Caribbean Sea with an estimated population of 2,673,800 (STATIN, 2007). In 2006, GNP was close to US$ 9 billion showing an increase at an average rate of 1.8% between 2000 and 2006. The value added of agriculture was about 5% of GNP in the same period (World Bank, 2008). Although the share of agricultural products of total exports is approximately 24% (2000-2004, FAO), Jamaica remains a net importer of such products.

2.7. The Policy and Planning Division of the Ministry of Agriculture and Lands reported that over the period 1999-2005, domestic crop production declined gradually by approximately 29 percent. However, the livestock sub-sector, by comparison, has shown a potential for growth, as Table 1 suggests. Production of goats, sheep, pigs and poultry performed reasonably well during the period. Despite the challenges of natural disasters, praedial larceny, and high input costs, the production of cattle marginally increased over the period 1999 to 2003. The growth rate of all livestock for the period 1999-2004 was 5.7% (FAOSTAT), one of the highest of the Caribbean. It is worth noting that prices to producers (in US$) of beef and fresh cow's milk has tended to increase modestly since 2003. With respect to livestock density the figure for Jamaica was 87.4 livestock units per $km^2$in 2004, lower than that of Puerto Rico (131.0) and Trinidad and Tobago (241.7) for the same year (FAOSTAT).

**Table 1: Jamaica: Livestock Production by unit heads 1999-2005**

| Year | Sheep (hds) | Goats (hds) | Pigs ( hds) | Poultry(kgs 000) | Cattle (hds) |
|---|---|---|---|---|---|
| 1999 | 425 | 42,237 | 109,638 | 72,932 | 61,406 |
| 2000 | 421 | 40,467 | 109,127 | 77,124 | 60,302 |
| 2001 | 382 | 42,244 | 109,264 | 82,898 | 60,641 |
| 2002 | 387 | 38,647 | 90,373 | 83,839 | 63,520 |
| 2003 | 327 | 36,908 | 102,916 | 94,242 | 66,532 |
| 2004 | 437 | 39,944 | 119,530 | 96,475 | 52,379 |
| 2005 | 1029 | 47,596 | 158,853 | 101,513 | n.a. |

*Source: MOA&L Planning and Policy Unit*

## C. The Animal Health Services System

2.8. The Veterinary Services Division of the Ministry of Agriculture and Lands (see Fig.1 for current structure) is the Competent Authority with responsibility for the development, implementation and administration of

Jamaica's national animal health and related food safety programme which includes:

- Animal disease surveillance and monitoring
- Quarantine and ports of entry surveillance
- Inspection and certification for export of foods of animal origin
- Inspection and licensing of establishments and fishing vessels involved in the harvesting and processing of aquaculture, inland and marine products and by-products for export
- Monitoring imports of animals and products of animal origin by way of issuance of veterinary import permits
- Laboratory analysis through the operation of veterinary Diagnostic, Residue and Biochemical Analytical laboratories.

2.9. The legislative framework under which the VSD operates consists of the following two main laws:

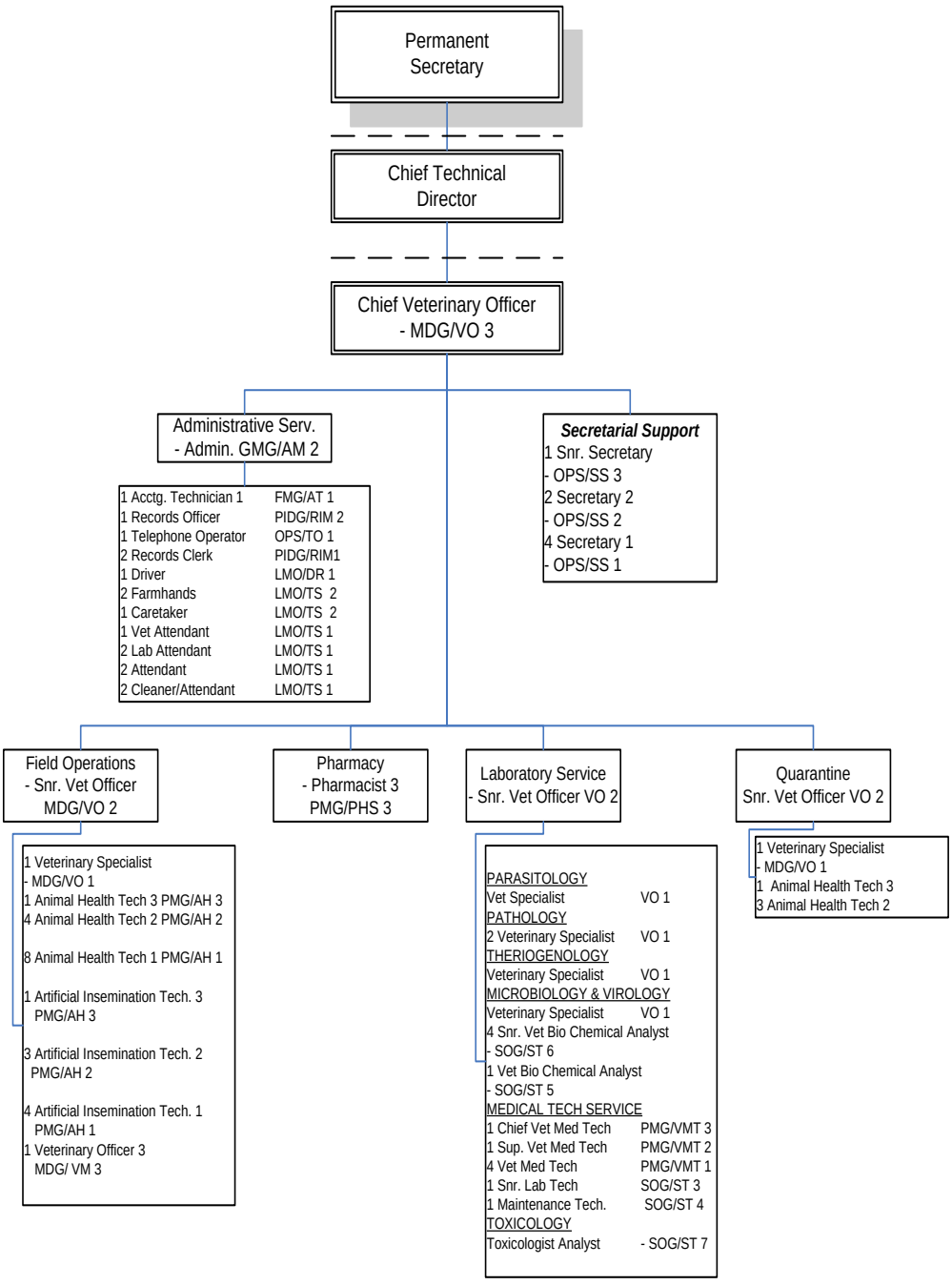
- Animal (Disease and Importation) Act, 1943 and Regulations of 1948
- The Aquaculture, Inland and Marine Products and By-Products Act, 1999 and Regulations, 2000.

2.10. The Mission Statement of the VSD: To strive for excellence in the delivery of world-class Veterinary Services that promote and sustain the advancement of a healthy animal population, increased production and productivity, food safety and security; facilitate trade in animal and animal products; effectively manage bio-security; play a lead role in animal safety and welfare and enhance the advancement of public health and economic growth in Jamaica.

2.11. Other ministries with direct involvement in the animal health system include the Ministries of Health, Industry and Commerce and Local Government. These ministries through their various agencies and departments such as the Veterinary Public Health Division, the Pharmaceutical Division, the Bureau of Standards Jamaica and the Food Storage and Prevention of Infestation Division work in collaboration with the VSD as it carries out its mandate. Other stakeholders include farmers, farmers' organizations, the livestock industry, private sector companies and organizations and animal health associations.

# Figure 1

## Ministry of Agriculture & Lands
## Veterinary Services Division
## Existing Organisational Structure
1/19/07



## D. Evaluation and reorganization of the Animal Health Services

2.12. During the period December 2006 and April 2007, at the request of the Ministry of Agriculture and Lands, an extensive evaluation of the VSD was conducted. This activity was carried out separately by the OIE and IICA with each agency focusing on different aspects of the operation of the VSD. The OIE's evaluation focused on the technical areas of the veterinary services while the focus of the assessment conducted by IICA was on the areas of management, organizational structure, staff and customer service delivery.

### D-1. The OIE Evaluation

2.13. The OIE evaluation was conducted in December of 2006 using the Performance, Vision, Strategy (PVS) instrument originally developed jointly by IICA and OIE and latter transformed by OIE into its own evaluation tool. The main objective of this evaluation was to ascertain the status of the Veterinary Services, its strength and weaknesses while at the same time raising awareness of the need for continual improvement.

2.14. The evaluation was based on the four critical components of the PVS instrument which includes areas such as animal health, veterinary public health, veterinary statutory bodies, education and training for veterinary professionals and paraprofessionals and laboratories services.

2.16 The evaluation revealed areas of weaknesses and strengths and offered several recommendations for improvement of the VSD. These include increasing the number of veterinarians and other professionals, technical and support personnel, increasing interaction with the private sector, increasing institutional capabilities through continuous training of the VSD personnel, the establishment of an Epidemiology Unit, implementing epidemiological surveillance programmes, substantial improvement of the laboratory capacity and services and incorporating the relevant functions of Veterinary Public Health (VPH) into the VSD thus creating a single entity responsible for all veterinary services.

### D-2- The IICA Assessment

2.17 The assessment exercise conducted by IICA was carried out in two stages: the process began in December 2006 and was completed in April 2007. The terms of reference for this exercise were to conduct a review of the operations of the VSD and furnish recommendations with respect to:

:

- The organizational structure and staffing arrangements
- The regulatory framework

- Customer service delivery
- Infrastructure
- Facilitation of business development and trade
- Interaction with stakeholders

2.18 A comprehensive report detailing the findings and recommendations was prepared and presented to the Ministry of Agriculture and Lands. The main recommendation is a proposed organization structure for the modernization of the VSD. This new structure covers areas such as increase in the cadre of staff at all levels, the restructuring and de-centralization of the operations of the VSD in order to provide much needed services such as island-wide veterinary clinical care, improved laboratory services, improved customer service delivery and provision for training and staff mobility.

### D-3- Re-organization of the Animal Health Services

2.19 The Ministry of Agriculture and Lands is currently in the process of implementing its Agricultural Development Strategy whose objective is to "Ensure that the MOAL is efficient and effective in providing services and administering agriculture..." This strategy calls for the reorganization and rationalization of the structure of the Ministry, increased coordination of activities of the Ministry with other state agencies involved in agriculture, as well as increased consultation with all agricultural stakeholders, in particularly farmer organizations, NGO's and multilateral agencies.

2.20 The MOAL has indicated that it is committed to move ahead with the restructuring process and one very important aspect of this process is the modernization of the Veterinary Services. The present project proposal for the modernization of the VSD is based on recommendations resulting from the evaluation conducted by the OIE and IICA´s assessment.

## III. THE PROJECT

3.1. The final outcome expected from the implementation of the project is the transformation of the VSD into one that will deliver effective and efficient veterinary services to all stakeholders through the implementation of a new organizational structure focusing on personnel development and capacity building, customer service, disease surveillance, quarantine and laboratory services, infrastructure and equipment improvement and the provision of clinical and advisory services to farmers.

## A. The objectives of the Project

3.2. The general objective is to improve and strengthen the capability and capacity of the VSD in the delivery of veterinary services in order to maintain a healthy animal population, enhance public health, food safety and security, facilitate trade and safeguard animal welfare.

3.3. The *specific objectives* are the following.

1. To modernize the infrastructure and equipment and to improve the capacity in the delivery of services
2. To establish an effective laboratory and diagnostic and field investigative service
3. To establish an effective animal identification system to enhance food safety and traceability activities
4. To achieve international levels in food safety and facility certification
5. To establish an updated quarantine service in support of trade and disease prevention and control
6. To collaborate with relevant national and international agencies in support of programmes
7. To be in compliance with national and international standards and protocols
8. To improve and upgrade the technical and professional capacity of all levels of staff

## B. Geographic coverage

3.4. The project will be implemented over the entire island with activities divided into three geographic regions to cover all fourteen parishes of the country.

## C. Beneficiaries of the project

3.5. The beneficiaries will be (i) producers of livestock and animal products, (ii) processors, (iii) producer associations (iv) marketers and traders of animals and animal products, (v) importers and exporters of animals and animal products (vi) consumers and (vii) VSD staff

## D. Components of the project

3.6. The project consists of four components, namely: (i) Implementation of a New Organizational Structure, (ii) Development of Technical Capabilities (Training), (iii) Renovation of Infrastructure and Procurement of

Equipment and (iv) Delivery of Veterinary (Field) Services. These four components are designed to meet the objectives of the project.

## E. Component 1. Implementation of New organizational Structure

3.7. This component attempts to put into operation a new structure for the VSD by designing and implementing institutional arrangements that focus on personnel, customer service, imports and exports, disease surveillance and veterinary public health. The organizational structure suggested in this proposal is a modified version of the one proposed by the IICA. The implementation dynamics is shown in Table A.1.1 of Annex 1.The corresponding organizational structure is shown in figure A.1.1.of Annex 1. This component includes the following subcomponents.

1.1. ***Sub-component***: Strengthening of managerial and professional capacity

*Main Targets*. All personnel hired over a period of five years; for posts approved in the first year, personnel hired within 6 months of the start of the project.

*Main Activities*

1.1.1. Recruitment of personnel: Veterinary specialists (Theriogenologist, Epidemiologist, Microbiologist, Pathologist, Virologist, Toxicologist, Parasitologist, Veterinary Public Health), Technicians (laboratory and field), managerial personnel.

1.2. ***Sub-component***: Establishment of an Import/Export Unit

*Main Targets*. A more efficient system of monitoring, inspection and certification of imports and exports developed and in operation within the first year of the project. Upgrading of quarantine facilities, within the second year of the project.

*Main Activities*

1.2.1. Develop standard operating procedures for inspection, certification and monitoring of imports and export.
1.2.2. Develop a more efficient system for the preparation and issuing of import permits.
1.2.3. Develop procedures for risk analysis (imports, exports, disease risk).
1.2.4. Upgrading of the quarantine facilities (including updating protocols, developing standard operating procedures and good management practices)

1.3. ***Sub-component***: Establishment of a Customer Service section

*Main Targets.* The Customer Service Unit established. It is operational within 6 months after the approval of the new organizational structure.

*Main Activities.*

1.3.1. Develop a programme for the section (Access to information, public relations).
1.3.2. Implement a system to address enquiries and complaints.

1.4. ***Sub-component***: Establishment of an epidemiological/VPH/Food Safety Unit.

*Main Targets*. The Epidemiology Unit established and fully functional within 2 years, in particular a) staff recruited and trained, b) veterinary public health (VPH) activities incorporated and a short term Epidemiologist contracted to establish the Unit within one year after the project begins.

*Main Activities*

1.4.1. Hiring an Epidemiologist (as a consultant for one year) to set up the epidemiology Unit and to train two assistants.
1.4.2. Design and implement the programmes for the Unit (Disease surveillance, control, prevention and eradication, food safety, inspection and certification of products and facilities).
1.4.3. Design and implement a programme for the promotion of food safety among the stakeholders.
1.4.4. Hiring a short term consultant to develop procedures for risk analysis.
1.4.5. Rationalize the veterinary public health activities between the Ministry of Health and the Ministry of Agriculture and Lands.
1.4.6. Organize simulation exercises to maintain animal disease emergency preparedness.

1.5. ***Sub-component***: The updating and/or promulgation of legislation

*Main Targets.* a) Existing legislation reviewed and recommendations for new legislation proposed by year two of the project to support all activities of the VSD, b) other legislation currently being amended finalized within one year, c) first draft of legislation for control and monitoring of stray animals (traceability) completed within one year.

*Main Activities*.

1.5.1. Hiring a short term consultant to advice on harmonization of legislation.
1.5.2. Make recommendations to amend current legislation and to promulgate new legislation to conform to both national and international standards and agreements.

1.6. ***Sub-component***: Develop an effective cost recovery scheme.

*Main Targets.* Updated and improved cost recovery system in place within 15 months of the start of the project.

*Main Activities*.

1.6.1. Elaborate on and adapt the study already done in cost recovery for the VSD.
1.6.2. Improve and enforce the mechanism to recover the costs of selected services.

## F. Component 2. Development of Technical Capabilities (Training)

3.8. In order to increase the capabilities, effectiveness and efficiency of the VSD, the project proposes a training programme for continuing education for all categories of staff. It covers several fields of knowledge including training of relevant staff (veterinarians, technicians, technologists, analysts, administrative and support staff) up to post graduate specialist level for certain professionals. Training will also be achieved through the establishment of alliances with universities, laboratories, agencies and countries both regionally and internationally (see proposed training programme in Table A.2.1 Annex 2). The main targets and activities of this component are described below.

*Main Targets*. a) All personnel attend at least one training activity within the first two years of the project. b) At least one person per year receives training at postgraduate level.

*Main Activities*

2.1 Develop and implement an in-house technical training programme for newly recruited and currently employed Animal Health Technicians.

2.2 Establish a strategic alliance with the College of Agriculture, Science and Education (CASE) to develop training modules for Artificial Insemination Officers, Animal Health Technicians and Livestock Technicians.

2.3 Training of relevant staff (veterinarians, veterinary medical technicians, technologist and analysts) in post graduate specialist areas.

2.4 Implement training programme (see Table A.2.1. annex 2).

## G. Component 3. Renovation of Infrastructure and Procurement of Equipment

3.9. In order to delivery more veterinary services, efficiently and of high quality, to the stakeholders, it is necessary to renovate the infrastructure and equipment of the VSD, such as the main laboratories, the clinical complexes and residences, the Quarantine station, the animal insemination facilities. This component has the following subcomponents.

3.1. ***Sub-component***: Laboratory Improvement.

*Main Targets.* Improve lab capacity and capability to enable accreditation and to provide laboratory support services effectively and efficiently for the programmes and activities of the VSD.

*Main Activities*

3.1.1. Fill lab specialist posts (refer to the " Implementation Dynamics of the of the New Organizational Structure", Annex 1).
3.1.2. Procure relevant equipment, materials and reagents
3.1.3. Training of lab technical staff (refer to Training Programme, Table A.2.1 Annex 2)
3.1.4. Renovate Diagnostic and Residue Laboratories.

3.2. ***Sub-component***: Renovation and improvement of facilities.

*Main Targets.* Renovation of : a) clinical complexes and residences, b) laboratories, c) animal fertility facility and d) quarantine station, within 36 months of the start of the project.

*Main Activities*

3.2.1. Estimated cost based on bills of quantities for renovations/repairs prepared by the Facility and Property Management Unit of the MOAL.
3.2.2. Renovate and repair veterinary clinics/residences in the parishes.
3.2.3. Renovate Quarantine Station at Plumb Point.
3.2.4. Renovate Artificial Insemination facilities at Bodles Research Station.
3.2.5. Renovate and restore pharmacy/store.
3.2.6. Construct Stray Animal Facilities.

## H. Component 4. Delivery of Veterinary (Field) Services

3.10. This component addresses the delivery of an improved and more efficient field services to farmers and other stakeholders. It complements the other

three components since it involves the design and implementation of new or improved programmes, hiring and training relevant personnel, restoring facilities and upgrading and acquiring equipment to operate the facilities effectively and efficiently.

4.1. ***Sub-component***: Restoration of the veterinary clinical care services.

*Main Targets.* All the clinical complexes and residences are operating within 36 months of the start of the project. The provision of clinical care begins within the first year of the project.

*Main Activities*

4.1.1. Hiring of personnel -Veterinarians, animal technicians and support staff- (refer to the "Implementation Dynamics of the New Organizational structure", Table A.1.1. Annex 1).
4.1.2. Renovation of clinics and residences (same as Activity 3.2.2).
4.1.3. Procurement of required vehicles (four-wheel drive vehicles).
4.1.4. Procurement of necessary pharmaceuticals and other materials.
4.1.5. Procurement of necessary equipment.
4.1.6. Training of personnel (refer to Training Programme, Table A.2.1.Annex 2).

4.2. ***Sub-component***: Improvement of Animal Fertility Service.

*Main Targets.* Animal Fertility Service improved and operating within 18 months of the start of the project.

*Main Activities*

4.2.1. Upgrading of infrastructure (refer to Activity 3.2. 4).
4.2.2. Procurement of necessary equipment.
4.2.3. Hiring of fertility officer –theriogenologist.
4.2.4. Training of personnel (refer to Training Programme, Table A.2.1.Annex 2).

4.3. ***Sub-component***: Implementation of the National Animal Identification System.
*Main Targets.* Improved National Animal Identification Service is in operation within 27 months.

*Main Activities*

4.3.1. Further development of the animal identification programme.

4.3.2. Implement training programme (refer to Training Programme, Table A.2.1, Annex 2).
4.3.3. Procurement of materials and equipment.

4.4. ***Sub-component***: Implement a programme to undertake disease surveillance, control, prevention and eradication activities.

*Main Targets.* Programme fully operational by year two of the project.

*Main Activities*

4.4.1. Implement programme in the field (refer to Subcomponent 1.4).

4.5. ***Sub-component***: Field investigation and research activities.

*Main Targets.* Programme developed and operational by year two of the project.

*Main Activities*

4.5.1. Develop and implement a programme for field investigation and research activities (on-going).
4.5.2. Procurement of necessary equipment (including GPS) and supplies (on-going).

4.6. ***Sub-component***: To establish an appropriate stray animal control and monitoring programme.

*Main Targets.* Programme in operation within 30 months of the start of the project.

*Main Activities*

4.6.1. Develop and implement a pilot programme within 18 months of the start of the project and the national programme 12 month thereafter.
4.6.2. Determine the needs for training and implement accordingly.
4.6.3. Construct facilities (pounds) for stray animals (refer to Subcomponent 3.2, Activity 3.2.6.).
4.6.4. Procure materials and equipment (catchers, vehicles, etc.).
4.6.5. Make recommendations for the implementation of new legislation.

## I. Project Implementation

### I-1. Project Implementation Unit

3.11. It is recommended that a Project Implementation Unit (PIU) be established within the VSD for effective execution of the project. The PIU should consist of a project manager (a consultant), an assistant and a secretary. The function of the PIU will be to manage and monitor the execution of the project, under the supervision of the Director of the VSD. The Unit should have an equipped office and a vehicle in order to carry out its duties efficiently (the costs of setting up and operating the PIU are included in the budget of the project). It is also recommended that a Project Management Committee (PMC) be formed to provide general oversight of the project. The PMC should include representatives from all the relevant Ministries, livestock associations, exporters and importers, producers, NGOs and other relevant stakeholders.

### I-2. Execution Plan

3.12. Taking into account the extent of the modernization of the VSD that is proposed, the schedule of activities for the project will cover a period of five years as detailed in Table 2.

| Table 2. Schedule of Activities of the Project | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Components / Sub-components / Activities to be implemented** | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
| | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| **0. Project implementation** | | | | | | | | | | | | | | | | | | | | |
| 0.1. Activity: Establishment of Project Implementation Unit (PIU) | | | | | | | | | | | | | | | | | | | | |
| 0.2. Activity: Management of the project | | | | | | | | | | | | | | | | | | | | |
| **1. Component: Implementation of New Organizational Structure.** | | | | | | | | | | | | | | | | | | | | |
| 1.1. Sub-component: Strengthening of managerial and professional capacity | | | | | | | | | | | | | | | | | | | | |
| 1.1.1. Activity: Recruitment of personnel (Refer to Annex 1) | | | | | | | | | | | | | | | | | | | | |
| 1.2. Sub-component: Establishment of an Import/Export Unit | | | | | | | | | | | | | | | | | | | | |
| 1.2.1. Activity: To develop SOP for monitoring, inspection and certification system, issuing of permits and export certification | | | | | | | | | | | | | | | | | | | | |
| 1.2.2. Activity: To develop a more efficient system for the issuing of permits | | | | | | | | | | | | | | | | | | | | |
| 1.2.3. Activity: To develop procedures for risk analysis (imports, exports disease risk) | | | | | | | | | | | | | | | | | | | | |
| 1.2.4. Activity: Upgrading of the quarantine facilities, updating protocols, develop standard operating procedures, good management practices etc) | | | | | | | | | | | | | | | | | | | | |
| 1.3. Sub-component: Establishment of establish a Customer Service Section | | | | | | | | | | | | | | | | | | | | |
| 1.3.1. Activity: Develop a programme for the section (Access to information, public relations, developing information leaflets, pamphlet) | | | | | | | | | | | | | | | | | | | | |
| 1.3.2. Activity: To implement a system to address enquires and complaints | | | | | | | | | | | | | | | | | | | | |

**Table 2. Schedule of Activities of the Project** (continued 2/5)

| Components / Sub-components / Activities to be implemented | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 1.4. Sub-component: Establishment of an epidemiological/VPH/Food Safety Unit | | | | | | | | | | | | | | | | | | | | |
| 1.4.1. Activity: Hiring an epidemiologist (as a consultant for one year) to set up the epidemiology Unit and to train two assistants | | | | | | | | | | | | | | | | | | | | |
| 1.4.2. Activity: Design and implement the programmes for the Unit (Disease surveillance, control, prevention and eradication, food Safety, inspection and certification of products and facilities) | | | | | | | | | | | | | | | | | | | | |
| 1.4.3. Activity: Design and implement a programme for the promotion of food safety among the stakeholders | | | | | | | | | | | | | | | | | | | | |
| 1.4.4. Activity: Hiring a short term consultant to Develop procedures for risk analysis studies | | | | | | | | | | | | | | | | | | | | |
| 1.4.5. Activity: Rationalize the veterinary public health activities between the MOH and the MOA | | | | | | | | | | | | | | | | | | | | |
| 1.4.6. Activity: Organize simulation exercises to maintain animal disease emergency preparedness | | | | | | | | | | | | | | | | | | | | |
| 1.5. Sub-component: The updating and/or promulgation of legislation | | | | | | | | | | | | | | | | | | | | |
| 1.5.1. Activity: Hiring of a short term consultant to advice on harmonization of legislation | | | | | | | | | | | | | | | | | | | | |
| 1.5.2. Activity: Make recommendations to amend current legislation and to promulgate new legislation to conform to both national and international standards and agreements | | | | | | | | | | | | | | | | | | | | |
| 1.6. Sub-component: Development of an effective cost recovery scheme | | | | | | | | | | | | | | | | | | | | |
| 1.6.1. Activity: Elaborate on & adapt the study done in cost recovery for the VSD | | | | | | | | | | | | | | | | | | | | |
| 1.6.2. Activity: To improve and enforce the mechanism to recover the costs of selected services | | | | | | | | | | | | | | | | | | | | |

**Table 2. Schedule of Activities of the Project** (continued 3/5)

| Components / Sub-components / Activities to be implemented | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| **2. Component: Development of Technical Capabilities (Training)** | | | | | | | | | | | | | | | | | | | | |
| 2.1. Activity: Develop and initiate an in-house technical training module for recruits and some currently employed technicians | | | | | | | | | | | | | | | | | | | | |
| 2.2. Activity: To establish a strategic alliance with College of Agriculture, Science and Education (CASE) to develop training modules for Artificial Insemination Officers, Animal Health technicians and livestock technicians. | | | | | | | | | | | | | | | | | | | | |
| 2.3. Activity: Training of relevant staff in post graduate specialist areas (veterinarians, veterinary medical technicians / technologists / analysts). | | | | | | | | | | | | | | | | | | | | |
| 2.4. Activity: Implement training programme (Refer to table A.2.1. annex 2). | | | | | | | | | | | | | | | | | | | | |
| **3. Component: Renovation of Infrastructure and Procurement of Equipment** | | | | | | | | | | | | | | | | | | | | |
| 3.1.Sub-component: Laboratory Improvement | | | | | | | | | | | | | | | | | | | | |
| 3.1.1. Activity: To fill lab specialist posts (refer to the "dynamics of the implementation of the new organizational structure", table A.1.1. annex 1) | | | | | | | | | | | | | | | | | | | | |
| 3.1.2. Activity: Procure relevant equipment, materials and reagents | | | | | | | | | | | | | | | | | | | | |
| 3.1.3. Activity: Training of lab technical staff (refer to the training programme, see table A.2.1. annex 2) | | | | | | | | | | | | | | | | | | | | |
| 3.1.4. Activity: Renovate Diagnostic / Residue Laboratories | | | | | | | | | | | | | | | | | | | | |
| 3.2. Sub-component: Renovation and improvement of facilities | | | | | | | | | | | | | | | | | | | | |
| 3.2.1. Activity: Estimate cost based on Bills of quantities for renovations/repairs prepared by the Facility and Property Management Unit of the Ministry | | | | | | | | | | | | | | | | | | | | |
| 3.2.2. Activity: Renovate and repair Veterinary Clinics/Residences in the Parishes | | | | | | | | | | | | | | | | | | | | |

**Table 2. Schedule of Activities of the Project** (continued 4/5)

| Components / Sub-components / Activities to be implemented | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 3.2.3. Activity: Renovate Quarantine Station at Plumb Point | | | | | | | | | | | | | | | | | | | | |
| 3.2.4. Activity: Renovate Artificial Insemination facilities at Bodles Agricultural Station | | | | | | | | | | | | | | | | | | | | |
| 3.2.5. Activity: Renovate and restore pharmacy/store | | | | | | | | | | | | | | | | | | | | |
| 3.2.6. Activity: Construct Stray Animals Facilities | | | | | | | | | | | | | | | | | | | | |
| **4. Component: Delivery of Veterinary (Field) Services** | | | | | | | | | | | | | | | | | | | | |
| 4.1. Sub-component: Restoration of the veterinary clinical care services | | | | | | | | | | | | | | | | | | | | |
| 4.1.1. Activity: Hiring of personnel - Veterinarians, animal technicians and support staff- (refer to the "Dynamics of implementation of a new organizational estrructure", table A.1.1, annex A.2.1) | | | | | | | | | | | | | | | | | | | | |
| 4.1.2. Activity: Renovation of clinics and residences (refer to activity 3.2.2) | | | | | | | | | | | | | | | | | | | | |
| 4.1.3. Activity: Procurement of required vehicles (four-wheel drive vehicles) | | | | | | | | | | | | | | | | | | | | |
| 4.1.4. Activity: Procurement of necessary pharmaceuticals and other materials | | | | | | | | | | | | | | | | | | | | |
| 4.1.5. Activity: Procurement of necessary equipment | | | | | | | | | | | | | | | | | | | | |
| 4.1.6. Activity: Training of personnel (refer to training programme, table A.2.1.annex 2) | | | | | | | | | | | | | | | | | | | | |
| 4.2. Sub-component: Improve the Animal Fertility Service | | | | | | | | | | | | | | | | | | | | |
| 4.2.1. Activity: Upgrading Infrastructure (refer to activity 3.2.4) | | | | | | | | | | | | | | | | | | | | |
| 4.2.2. Activity: Procurement of necessary equipment | | | | | | | | | | | | | | | | | | | | |
| 4.2.3. Activity: Hiring of fertility officer - theriogenologist | | | | | | | | | | | | | | | | | | | | |

**Table 2. Schedule of Activities of the Project** (continued 5/5)

| Components / Sub-components / Activities to be implemented | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | | Quarter | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 4.2.4. Activity: Training of personnel (refer to training programme, table A.2.1.annex 2) | | | | | | | | | | | | | | | | | | | | |
| 4.3. Sub-component: Implementation of the National Animal Identification System | | | | | | | | | | | | | | | | | | | | |
| 4.3.1. Activity: Further development of the Programme for the animal identification system | | | | | | | | | | | | | | | | | | | | |
| 4.3.2. Activity: Implement training program (please refer to the training programme, table A.2.1 annex 2) | | | | | | | | | | | | | | | | | | | | |
| 4.3.3. Activity: Procurement of materials and equipment | | | | | | | | | | | | | | | | | | | | |
| 4.4. Sub-component: To implement a programme to undertake field surveillance, prevention and disease control and eradication activities | | | | | | | | | | | | | | | | | | | | |
| 4.4.1: Implement programme in the field (refer to subcomponent 1.4) | | | | | | | | | | | | | | | | | | | | |
| 4.5. Sub-component: Field investigation and research activities | | | | | | | | | | | | | | | | | | | | |
| 4.5.1: Activity: Develop and implement a programme for field investigation and research activities (on-going) | | | | | | | | | | | | | | | | | | | | |
| 4.5.2: Procurement of necessary equipment (GPS etc) and supplies (on-going) | | | | | | | | | | | | | | | | | | | | |
| 4.6. Sub-component: To establish an appropriate stray animal control and monitoring programme | | | | | | | | | | | | | | | | | | | | |
| 4.6.1. Activity: Develop and implement a pilot programme (National programme afterwards) | | | | | | | | | | | | | | | | | | | | |
| 4.6.2. Activity: Determine the needs for training and implement accordingly | | | | | | | | | | | | | | | | | | | | |
| 4.6.3. Activity: Construction of Facilities for Stray Animals (pounds) (refer to Subcomponent 3.2, activity 3.2.6.) | | | | | | | | | | | | | | | | | | | | |
| 4.6.4. Activity: Procurement of materials and equipment | | | | | | | | | | | | | | | | | | | | |
| 4.6.5. Activity: Make recommendations for the implementation of new legislation | | | | | | | | | | | | | | | | | | | | |

## J. Budget

3.13. The Budget of the project to be implemented over a five-year period is presented in Table 3. The estimated total is US$ 6,843,533. The incremental cost of personnel to be hired is US$ 1,571,069 and represents 23% of the total cost of the project. The cost of implementing the training programme for all levels of staff is US$ 511,527 (7.5%. of total cost). Renovation of infrastructure and procurement of equipment (other than for field services) amounts to US$ 2,972,092 (44% of total cost) while the renovation of infrastructure and procurement of equipment for field services total US$ 497,142 (7% of total cost). A sum of US$ 467,500 is allocated to the Project Implementation Unit (7% of total cost). Finally, an amount of US$ 684,203 (10% of total cost) is allocated for contingencies. (In section A.3.2 some information used in the calculation of the budget is presented).

## K. Feasibility and Risks of the Project

### K-1. Institutional Feasibility

3.14. The proposed project seeks to transform the VSD, making it into a modern veterinary service. This transformation is possible and can be achieved with the input and commitment of both the public and private sectors. Collaboration between the Ministry of Agriculture and Lands and the Ministries of Health and Industry and Commerce will be necessary and important to ensure the success of this project. In addition, the input of the private sector and indeed all stakeholders in all aspects of the implementation process will also contribute to the successful outcome.

3.15. A major factor in the implementation is the strong political will and commitment of the Government of Jamaica to provide or source the resources necessary for the successful implementation of the project.

### K-2. Technical Feasibility

3.16. The modernization of the VSD is possible and can be achieved with the current capabilities of the professionals and technicians that exist in the Division. These capabilities, along with the Project Implementation Unit, short term consultants with specialization in areas such as risk analysis, epidemiology and legislation, strategic alliances with relevant stakeholders and with guidance from the Project Management Committee will together ensure the successful implementation of the project.

### K-3. Environmental Feasibility

3.17. The activities to be carried out in this project will be done with due regard for the environment and are not expected to have any negative environmental impact.

### K-4. Socio-economic Feasibility

3.18. One of the important mandates of the VSD is to protect the country from the introduction and establishment of animal pests and diseases which have the potential of causing harm to human and animal health and adversely affect agriculture in general. Just as an example, the cost of eradicating a disease such as Bovine Spongiform Encephalopathy (BSE or Mad Cow Disease) could amount to upwards of US$4 million and this figure does not take into account other costs resulting from reduction in production, loss of export markets, public health costs and possible losses in the tourism sector which could run into the hundreds of millions of dollars.

3.19. Taking into account that the value of the annual flow of animal stock services is in Jamaica is estimated in more than US$ 150 000 000[1] per year and, at the same time, that the average annual cost of the project is US$ 1 368 707 (=US$6 843 533 / 5), the cost of the project represents at the most 0.91% of the annual flow of animal stock services. Thus, the benefits that will accrue from having a modern veterinary service which is able to handle challenges such as this will far outweigh the cost of the project. In addition, the cost recovery scheme implemented by the project will add resources to finance, directly or indirectly, the operation of the VSD.

3.20. The execution of the project will positively impact all sectors of the society resulting in benefits in the areas of human and animal health, food safety, livestock production and exports. It will also result in employment generation and income for farmers and other participants in the animal and animal products industry.

### K-5. Risks faced by project and their mitigation

[1] Value added of agriculture per year = 5% of GNP which amounts to approximately US$ 4 500 000 per year. Then the annual flow of services of livestock sub-sector can be estimated in at least one third of that amount (i.e. US$ 150 000 000 per year).

3.21. The following risks have been identified as factors that could adversely affect the successful execution of the project: (i) insufficient skilled personnel to be recruited by VSD to improve the veterinary services, (ii) lack of government and/or stakeholders support for the project implementation, (iii) insufficient technical cooperation from international agencies, (iv) unavailability of funds for the project during its execution.

3.22. Several measures have been considered to mitigate the foregoing identified risks. From the beginning, the project will implement the training programme to improve and upgrade the level of skills of the VSD personnel. In addition, consultants with qualifications in specialist areas will be hired.

3.23 The Ministry of Agriculture and Lands has demonstrated its commitment to the modernization of the VSD by taking decisive steps to realize this objective. The acceptance of the recommendations resulting from the OIE evaluation and the IICA assessment and the further request to develop a project speaks to the strong commitment of the MOAL. The private sector played an important role in the earlier evaluation and assessment process and it is expected that they will support the implementation of the project since any improvement in the VSD will benefit the private sector.

3.24International agencies have in the past provided technical assistance and support for agricultural development in Jamaica and it is expected that this support will continue for this project.

3.25 The MOAL in negotiating the terms and conditions of the funding for the project should ensure that provisions are in place for the availability of funds at all stages of the execution of the project.

## Table 3. Budget of Project

| COMPONENTS | TOTAL COST (US$) | YEAR | | | | |
|---|---|---|---|---|---|---|
| | | I | II | III | IV | V |
| | | US $ | US $ | US $ | US $ | US $ |
| **Component 1: Implementation of new organizational structure** | **1,711,069** | **75,000** | **802,728** | **237,725** | **356,622** | **238,994** |
| Cost of incremental personnel | 1,571,069 | 0 | 737,728 | 237,725 | 356,622 | 238,994 |
| Honoraries of consultants in several aspects of the implementation of structure (see table 2) | 140,000 | 75,000 | 65,000 | | | |
| **Component 2: Development of Technical Capabilities** | **511,527** | **123,405** | **105,905** | **104,405** | **78,905** | **98,905** |
| Training | 511,527 | 123,405 | 105,905 | 104,405 | 78,905 | 98,905 |
| **Component 3: Renovation of infrastructure and equipment** | **2,972,092** | **1,087,765** | **1,002,067** | **323,591** | **288,513** | **270,155** |
| Residue Laboratory: equipment, materials and reagents | 388,610 | 155,444 | 97,153 | 77,722 | 38,861 | 19,431 |
| Diagnostic Laboratory: equipment, materials and reagents | 1,106,339 | 138,750 | 221,343 | 245,869 | 249,652 | 250,724 |
| Renovation of Diagnostic/Residue Laboratories | 10,000 | 5,000 | 5,000 | | | |
| Renovation of Quarantine Station at Plumb Point | 1,357,143 | 678,571 | 678,571 | | | |
| Restoration of Pharmacy/Store (equipment and pharmaceuticals) (see A.3.2). | 100,000 | 100,000 | | | | |
| Renovation and equipment for the Conference/training room | 10,000 | 10,000 | | | | |
| **Component 4: Delivery of Veterinary (Field) Services** | **497,142** | **219,285** | **235,714** | **37,143** | **5,000** | **0** |
| Renovation and equipment for 14 clinics (Equipment, residences in the Parishes, see annex 3) | 300,000 | 128,571 | 171,429 | | | |
| Renovation of Artificial Insemination Facilities at Bodles Agricultural Station (see annex 3) | 28,571 | 28,571 | | | | |
| Construction and upgrading of Stray Animals Facilities (see annex 3) | 134,285 | 50,000 | 52,143 | 32,143 | | |
| Equipment for the National Animal Identification System (see anex 3) | 134,285 | 7,143 | 7,143 | | | |
| Equipment and materials for Field Investigation and Research Activities | 20,000 | 5,000 | 5,000 | 5,000 | 5,000 | |
| **Implementation and operation of Technical Unit to execute and monitor the project** | **467,500** | **117,500** | **87,500** | **87,500** | **87,500** | **87,500** |
| **Contingencies 10%** | **684,203** | **180,328** | **248,046** | **87,818** | **90,727** | **77,284** |
| **TOTAL** | **6,843,533** | **1,803,285** | **2,481,961** | **878,183** | **907,268** | **772,837** |

Note: Exchange rate utilized for this study JA$ 70 per US$ 1

# Annex 1

Figure A.1.1.

**VETERINARY SERVICES DIVISION**

**UPDATED STRUCTURE**

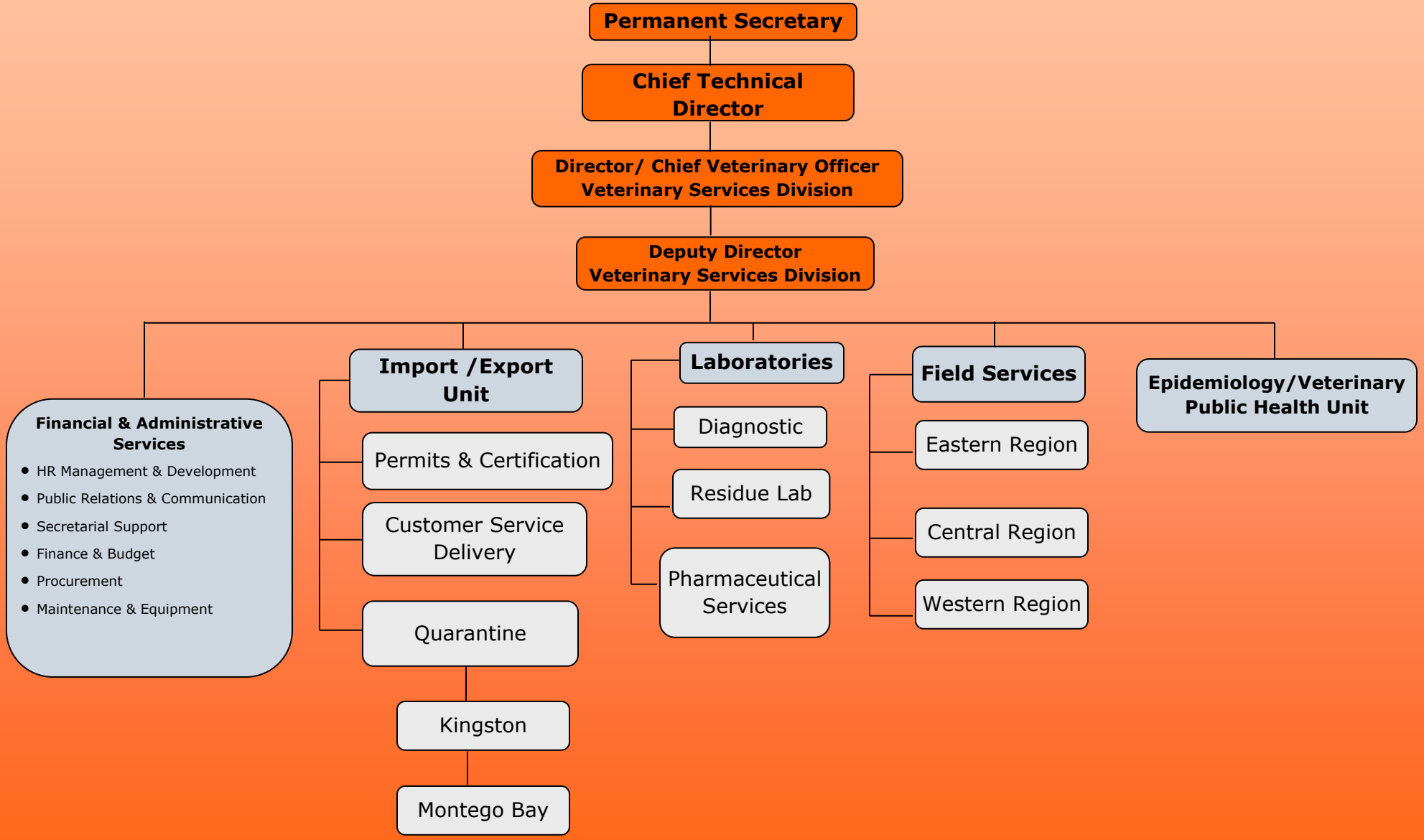


**Table A.1.1. Implementation Dynamics of the New Organizational Structure for the Veterinary Services Division**

| Post / Unit / Section | Year 1 2008-2009 | Year 2 2009-2010 | Year 3 2010-2011 | Year 4 2011-2012 | Year 5 2012-2013 |
|---|---|---|---|---|---|
| | No. | No. | No. | No. | No. |
| **Veterinary Services Division** | | | | | |
| Director (CVO) of Veterinary Services Division | 1 | 1 | 1 | 1 | 1 |
| **Administrative and Finance Unit** | | | | | |
| Finance and Administrative Manager | 1 | 1 | 1 | 1 | 1 |
| Senior Accountant | 0 | 1 | 1 | 1 | 1 |
| Accounting Technician | 1 | 1 | 2 | 2 | 2 |
| Cashier | 1 | 1 | 1 | 1 | 1 |
| Administrative Secretary to the Director of the VSD | 1 | 1 | 1 | 1 | 1 |
| Secretary to the Finance and Administrative Manager | 1 | 1 | 1 | 1 | 1 |
| Secretary to the Deputy Director | 1 | 1 | 1 | 1 | 1 |
| Human Resource Officer | 1 | 1 | 1 | 1 | 1 |
| Records Officers | 2 | 2 | 2 | 2 | 2 |
| Telephone Operator | 1 | 1 | 1 | 1 | 1 |
| Driver/messenger | 1 | 1 | 1 | 2 | 2 |
| **Ancillary Staff** | | | | | |
| Caretaker | 1 | 1 | 1 | 1 | 1 |
| Gardener | 1 | 1 | 1 | 1 | 1 |
| Cleaner/Attendant | 2 | 2 | 2 | 2 | 2 |
| **Technical Programme** | | | | | |
| Deputy Director (DCVO) (in charge of technical programmes) | 1 | 1 | 1 | 1 | 1 |
| **Import /Export Unit** | | | | | |
| Senior Veterinary Officer | 1 | 1 | 1 | 1 | 1 |
| Veterinary Officer | 1 | 1 | 1 | 2 | 2 |
| Senior Secretary ii | 1 | 2 | 2 | 2 | 2 |
| Customer Service Officer/Receptionist | 2 | 2 | 2 | 3 | 3 |
| **Quarantine Section** | | | | | |
| Senior Veterinary Officer in Charge of Quarantine | 1 | 1 | 1 | 1 | 1 |
| **Kingston** | | | | | |
| Veterinary Officer | 1 | 1 | 1 | 1 | 1 |
| Animal Health Technician 2 and 3 | 5 | 7 | 10 | 13 | 15 |
| Secretary/Admin Assistant | 1 | 1 | 1 | 1 | 1 |
| Caretaker/Farmhands | 2 | 2 | 2 | 2 | 2 |
| Cleaner Attendant | 1 | 2 | 2 | 2 | 2 |

**Table A.1.1. Implementation Dynamics of the New Organizational Structure for the Veterinary Services Division** (continued 2/3)

| Post / Unit / Section | Year 1 2008-2009 | Year 2 2009-2010 | Year 3 2010-2011 | Year 4 2011-2012 | Year 5 2012-2013 |
|---|---|---|---|---|---|
| | No. | No. | No. | No. | No. |
| **Montego Bay** | | | | | |
| Veterinary Officer | 0 | 1 | 1 | 1 | 1 |
| Animal Health Technician 2, and 3 | 3 | 4 | 5 | 6 | 6 |
| Secretary 2 | 1 | 1 | 1 | 1 | 1 |
| Cleaner | 1 | 1 | 1 | 1 | 1 |
| **Epidemiology/Veterinary Public Health Unit/Food Safety Unit** | | | | | |
| Epidemiologist | 1 | 1 | 1 | 1 | 1 |
| Veterinary Public Health Officer | 0 | 1 | 1 | 1 | 1 |
| Veterinarian Public Health Inspectors | 0 | 0 | 14 | 14 | 14 |
| **Laboratory Section** | | | | | |
| Laboratory Manager | 1 | 1 | 1 | 1 | 1 |
| Senior Lab Technician | 1 | 1 | 1 | 1 | 1 |
| Lab Technician | 1 | 2 | 2 | 2 | 2 |
| Maintenance Technician | 1 | 1 | 1 | 1 | 1 |
| Data Entry Officer | 1 | 1 | 1 | 1 | 1 |
| **Diagnostic Laboratory** | | | | | |
| Chief Veterinary Medical Technologist | 1 | 1 | 1 | 1 | 1 |
| Supervisory Veterinary Medical Technologist | 1 | 1 | 1 | 1 | 1 |
| Veterinary Medical Technologist | 4 | 5 | 6 | 6 | 6 |
| Veterinary Microbiologist/Virologist | 1 | 1 | 1 | 1 | 1 |
| Veterinary Pathologist | 1 | 1 | 1 | 1 | 1 |
| Serologist | 0 | 1 | 1 | 1 | 1 |
| Parasitologist | 0 | 1 | 1 | 1 | 1 |
| Veterinary Medical Technicians | 1 | 1 | 1 | 1 | 1 |
| Laboratory attendant | 1 | 1 | 2 | 2 | 3 |
| **Residue Laboratory** | | | | | |
| Toxicologist/Analyst | 1 | 1 | 1 | 1 | 1 |
| Senior Veterinary Biochemical Analyst | 4 | 4 | 4 | 4 | 4 |
| Veterinary Biochemical Analyst | 1 | 1 | 1 | 1 | 1 |
| Laboratory Attendant | 1 | 1 | 1 | 1 | 1 |
| Laboratory Animal Attendant | 0 | 1 | 1 | 1 | 1 |
| **Pharmacy** | | | | | |
| Pharmacist | 1 | 1 | 1 | 1 | 1 |
| Pharmacist Assistant/Store-keeper | 0 | 1 | 1 | 1 | 1 |
| **Field Services Section** | | | | | |
| Veterinary Officer in Charge of Field Services | 1 | 1 | 1 | 1 | 1 |

**Table A.1.1. Implementation Dynamics of the New Organizational Structure for the Veterinary Services Division** (continued 3/3)

| Post / Unit /Section | Year 1 2008-2009 | Year 2 2009-2010 | Year 3 2010-2011 | Year 4 2011-2012 | Year 5 2012-2013 |
|---|---|---|---|---|---|
| | No. | No. | No. | No. | No. |
| **Eastern Region (Portland, St. Thomas, Kingston and St. Andrew)** | | | | | |
| Veterinary Officer in Charge of the Region | 1 | 1 | 1 | 1 | 1 |
| Local Veterinary Inspectors | 1 | 3 | 3 | 3 | 3 |
| Veterinary Officers | 0 | 2 | 2 | 2 | 2 |
| Animal Health Technicians | 6 | 8 | 10 | 11 | 12 |
| **Central Region (St. Ann, St. Mary, Manchester, Clarendon, St. Catherine)** | | | | | |
| Veterinary Officer in Charge of the Region | 1 | 1 | 1 | 1 | 1 |
| Local Veterinary Inspectors | 2 | 5 | 5 | 5 | 5 |
| Veterinary Officers | 1 | 1 | 1 | 2 | 3 |
| Animal Health Technicians | 19 | 19 | 19 | 19 | 20 |
| **Western Region (Hanover, St. James, Westmoreland, Trelawney, St.Elizabeth)** | | | | | |
| Veterinary Officer in Charge of the Region | 1 | 1 | 1 | 1 | 1 |
| Local Veterinary Inspectors | 2 | 3 | 4 | 5 | 5 |
| Veterinary Officers | 0 | 1 | 2 | 2 | 3 |
| Animal Health Technicians | 14 | 15 | 16 | 18 | 20 |
| Veterinary Clinical Attendant | 1 | 1 | 1 | 1 | 1 |
| **Animal Fertility Unit** | | | | | |
| Theriongenologist | 1 | 1 | 1 | 1 | 1 |
| Veterinary Officer (Bodles) | 1 | 1 | 1 | 1 | 1 |
| Senior Artificial Insemination Officer | 0 | 1 | 1 | 1 | 1 |
| Artificial Insemination Technicians | 6 | 8 | 10 | 14 | 14 |
| Laboratory Technician | 0 | 1 | 1 | 1 | 1 |
| Secretary | 0 | 1 | 1 | 1 | 1 |
| Bull Handlers | 0 | 2 | 2 | 2 | 2 |

# Annex 2

| Table A.2.1. Training Programme | | | | | | |
|---|---|---|---|---|---|---|
| **Courses** | **Estimated number of courses in 5 years** | **Estimated trained personnel** | | | | |
| | | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
| | | **2008-09** | **2009-10** | **2010-11** | **2011-12** | **2012-13** |
| **A. Short courses in management for professional/technical staff in Jamaica** | | | | | | |
| Course 1. Basic management course for all veterinarians and Chief/ Senior analyst/medical technologist/senior animal health technicians (MIND). | 5 | 10 | 10 | 10 | 10 | 10 |
| Course 2 (Advanced management course for Senior Veterinarians (MIND/UWI) | 5 | 5 | 5 | 5 | 5 | 5 |
| Course 3 (Customer Service course for all levels of staff, MIND/Training Division of MOA) | 5 | 10 | 10 | 10 | 10 | 10 |
| **B. Continuing education for veterinarians -Jamaica/ Overseas/Visiting Consultancy/On line** | | | | | | |
| Course 1 Quarantine measures | 3 | At least 2 | | At least 2 | | At least 2 |
| Course 2 Disease surveillance/Epidemiology | 3 | At least 2 | | At least 2 | | At least 2 |
| Course 3 Food Safety (HAACP, Inspection of facilities, etc.) | 3 | At least 2 | | At least 2 | | At least 2 |
| Course 4. Disease emergency preparedness | 3 | At least 2 | | At least 2 | | At least 2 |
| Course 5. Other | 3 | | At least 2 | | At least 2 | At least 2 |
| **C. MSc/PhD Programs Local/Overseas for professional/technical staff** | | | | | | |
| Courses in selected areas | ---- | 1 | 1 | 1 | 1 | 1 |
| **D. Course for Animal Health Technicians in Jamaica** | | | | | | |
| Course 1 In-house technical training module for recruits and currently employed technicians | 2 | 25 | 25 | | | |
| Course 2 CASE Module for Animal Health Technicians | 3 | | | 15 | 15 | 15 |
| **E. Course for Animal Health Technicians Overseas** | | | | | | |
| Course 1 Quarantine course (USA/Canada) | 5 | 1 | 1 | 1 | 1 | 1 |
| Course 2 Advance course in AI (USA/Canada) | 5 | 1 | 1 | 1 | 1 | 1 |

| Table A.2.1. Training Programme (continued 2/2) | | | | | | |
|---|---|---|---|---|---|---|
| **Courses** | **Estimated number of courses in 5 years** | **Estimated trained personnel** | | | | |
| | | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
| | | **2008-09** | **2009-10** | **2010-11** | **2011-12** | **2012-13** |
| **F. Course for Artificial Insemination Technicians** | | | | | | |
| Course 1. Artificial Insemination training for current staff and recruits | 5 | 6 | 2 | 2 | 2 | 2 |
| Course 2. Training of Animal Health Technicians in AI techniques | 2 | 14 | | 14 | | |
| **G. Courses for Staff of the Residue Biochemical Laboratory** | | | | | | |
| Courses in several topics related to the Residue Biochemical Laboratory | 9 | 3 | 4 | 1 | 1 | |
| **H. Courses for Staff of Diagnostic Laboratory** | | | | | | |
| Courses in several topics related to the Diagnostic Laboratory | 25 | 6 | 7 | 5 | 4 | 3 |
| **I. Traninig visits (attachment) to intitutions in other countries** | | | | | | |
| Visits to other countries | 15 visits | 3 | 3 | 3 | 3 | 3 |
| **J. International Conferences / Meetings/Workshops** | | | | | | |
| **Events** | 10 events | 2 | 2 | 2 | 2 | 2 |

# Annex 3

| Table A.3.1 Cost of Training Programme | | | | | |
|---|---|---|---|---|---|
| **Courses / Visits / Events** | **Trained Personnel** | | | | |
| | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
| | **2008-2009** | **2009-2010** | **2010-2011** | **2011-2012** | **2012-2013** |
| | **US$** | **US$** | **US$** | **US$** | **US$** |
| **A. Short courses in management for professional/technical staff in Jamaica (1-2 weeks a year)** | | | | | |
| Course 1 (Basic management course for all veterinarians and Chief/ Senior analyst/medical technologist/senior animal health technicians MIND) | 4,429 | 4,429 | 4,429 | 4,429 | 4,429 |
| Course 2 (Advanced management course for Senior Veterinarians (MIND/UWI) | 4,527 | 4,527 | 4,527 | 4,527 | 4,527 |
| Course 3 (Customer Service course for all levels of staff, MIND/Training Division of MOA) | 2,450 | 2,450 | 2,450 | 2,450 | 2,450 |
| **B. Continuing education for veterinarians - Jamaica/ Overseas/Visiting Consultancy/On line** | | | | | |
| Course 1 Quarantine measures | 5000 | | 5000 | | 5000 |
| Course 2 Disease surveillance/Epidemiology | 5000 | | 5000 | | 5000 |
| Course 3 Food Safety (HAACP, Inspection of facilities, etc.) | 5000 | | 5000 | | 5000 |
| Course 4. Disease emergency preparedness | 5000 | | 5000 | | 5000 |
| Course 5. Other | | 5000 | | 5000 | 5000 |
| **C. MSc/PhD Programs Local/Overseas for professional/technical staff** | | | | | |
| Courses in selected areas | 10000 | 10000 | 10000 | 10000 | 10000 |
| **D. Course for Animal Health Technicians in Jamaica** | | | | | |
| Course 1 In-house technical training module for recruits and currently employed technicians | 15,000 | 15000 | | | |
| Course 2 CASE Module for Animal Health Technicians | | 10000 | | | |
| **E. Course for Animal Health Technicians Overseas** | | | | | |
| Course 1 Quarantine course (USA/Canada) | 2000 | 2000 | 2000 | 2000 | 2000 |
| Course 2 Advance course in AI (USA/Canada) | 2000 | 2000 | 2000 | 2000 | 2000 |

| Table A.3.1 Cost of Training Programme (continued 2/2) | | | | | |
|---|---|---|---|---|---|
| Courses / Visits / Events | Trained Personnel | | | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | 2008-2009 | 2009-2010 | 2010-2011 | 2011-2012 | 2012-2013 |
| | US$ | US$ | US$ | US$ | US$ |
| **F. Course for Artificial Insemination Technicians** | | | | | |
| Course 1. Artificial Insemination training for current staff and recruits | 6,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Course 2. Training of Animal Health Technicians in AI techniques | 10,500 | | 10500 | | |
| **G. Courses for Staff of the Residue Biochemical Laboratory** | | | | | |
| Courses in several topics related to the Residue Biochemical Laboratory | 8000 | 10000 | 8000 | 8000 | 8000 |
| **H. Courses for Staff of Diagnostic Laboratory** | | | | | |
| Courses in several topics related to the Diagnostic Laboratory | 25000 | 25000 | 25000 | 25000 | 25000 |
| **I. Training visits (attachment) to intitutions in other countries** | | | | | |
| Visits to other countries | 7500 | 7500 | 7500 | 7500 | 7500 |
| **J. International Conferences/Meetings/Workshops** | | | | | |
| Participation in events | 6000 | 6000 | 6000 | 6000 | 6000 |
| **TOTAL (US$)** | **123,405** | **105,905** | **104,405** | **78,905** | **98,905** |

## A.3. 2 Notes for the Budget Calculation

**Stray Animal Programme**

Pilot Programme for 4 Parishes to cover:

(1) Construction of pounds (corrals/housing/feeding facilities) JA$ 1,500,000 each Total JA$ 6,000,000. (**US$ 85,714**)

(2) Equipment and materials: animal restraining equipment (snares, chains, ropes, etc) JA$ 150,000 each .
Total JA$ 600,000. (**US$ 8,571**)

(3) Two Vehicles (four-wheel drive) **US$ 40 000**

**Clinics**

(4) Equipment (surgical, sterilizers, refrigerators, AC units, furniture, etc.). JA$1,500,000 each on average for 14 clinics.
(5) Total J$ 21,000,000. (**US$ 300,000).**

**Animal Identification Programme**

(6) Equipment JA$ 1,000,000 (**US$ 14 286**)

**Animal Fertility Service**

(7) Equipment (Semen processor, semen storage tanks, storage cool room, etc.) in year 1. JA$ 2,000,000. (**US$ 28 571**)

**Pharmacy/Store**

(8) Equipment (walk-in cold storage, freezers, coolers, etc)
JA$ 2,000,000 in year 1 (**US$ 28 571**)

(9) Cost of pharmaceuticals, drugs and various materials/reagents.
JA$ 5,000,000 in year 1 (**US$ 71 429**)

**Main Laboratories**

The estimation of costs of equipment and materials for labs calculated from information provided by the VSD.

**Rate of exchange:** JA$ 70 to US$ 1