GOVERNMENT OF JAMAICA/INTER-AMERICAN DEVELOPMENT BANK

AGRICULTURAL SUPPORT SERVICES PROJECT
GOJ/IDB LOAN NO.1283/OC-JA
Article 4.01(d)

PROJECT COMPLETION REPORT

Ministry of Agriculture & Fisheries
Hope Gardens
Kingston 6

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APPENDICES

EXECUTIVE SUMMARY

The Agricultural Support Services Project (ASSP) was implemented between February 2001 - August, 2009. The project was funded by the Inter-American Development Bank (IDB) and Government of Jamaica (GOJ). The main aim of the Project was to enhance the competitiveness of Jamaica's agriculture in domestic and global markets.

The original project budget was US$31.5 to be funded in part by a US$22 million loan to the Government of Jamaica from the Inter-American Development Bank (IDB) and a US$9.5 million contribution from the Government of Jamaica (GOJ). A decision by GOJ to reduce the size of its debt resulted in the cutting of the ASSP's Budget by US$6.1 million. The resultant project budget was as follows:

Project Cost	US$25.4M
❖ Inter American Development Bank (IDB)	US$17.8M
❖ Government of Jamaica	US$ 7.6M

The Agricultural Support Service and Productive Projects Fund Ltd. (ASSPPFL) is a company incorporated under the Companies Act and wholly owned by the Government of Jamaica. It was formed to manage and mobilize a pool of funds to be used to enhance the competitiveness of Jamaica's agriculture. US$6M was allocated from the project funds to provide grant funding to facilitate the provision of support services and fund select activities in productive projects.

The Project was implemented through three components:

Component 1 - Strengthening the Delivery of Agricultural Support Services

Component 2 - Strengthening and Consolidating Agricultural Health and Food Safety Services

Component 3 - Financing selected activities in high pay-off productive projects

The mandate was fulfilled through the following activities:

- ✓ Provision of funding for the delivery of agricultural support services
- ✓ Construction and refurbishing of facilities
- ✓ Training of technical personnel in the Ministries of Agriculture, Health and Industry Investment and Commerce
- ✓ Training farmers
- ✓ Development of Policies related to agricultural health and food safety
- ✓ Procurement of equipment and supplies
- ✓ Conducting market research and the development of feasibility studies and strategic plans
- ✓ Sociological intervention targeting farmers
- ✓ Development of industry and competitiveness plans
- ✓ Planning and implementation of Productive Projects

The ASSP has had a significant impact on the agricultural sector. Arising from the lessons learned, recommendations were made to facilitate the sustainability of key project initiatives. In this regard, an Exit Plan was developed and implemented during the final year of the project. The Plan addressed the consolidation and completion of initiatives undertaken by the ASSP, some of which were eventually embodied in the in the modernization plan for the Ministry of Agriculture and Fisheries.

As part of the Ministry's restructuring and modernization exercise the Agricultural Support Services and Productive Projects Fund Ltd. (ASSPPFL) has been merged with the Agricultural Development Corporation (ADC) to form a new entity, the Agro Investment Centre. This entity, which is in the early stages of implementation is responsible for promoting and facilitating investment in agriculture. Activities will be implanted through the following departments;

- Project Development
- Joint Venture
- Industry Development
- Marketing Development
- Investment Mobilization

Worthy of note is the fact that the ASSP had initiated activities in all of these areas.

SECTION 1. PROJECT SUMMARY

1.1 BACKGROUND/PROJECT SUMMARY/PROJECT IDENTIFICATION

The Frame of Reference for the Agricultural Support Services Project (ASSP) highlights the fact that the Agricultural sector is central to Jamaica's economy, but that it had not realized its full potential because of the many constraints faced by the sector. Foremost among these are the following:

- Globalization – the sector was highly protected until the early 1980's through import licenses, reference prices, stamp duties and quantitative restrictions. In 1995 Jamaica became a member of the WTO which made it subject to the agreements and provisions established by the organization. While creating significant price competition, globalization opened up new opportunities that the country had not capitalized on
- Agricultural exports have been dominated by a small number of crops such as sugar, bananas, coffee, cocoa and citrus
- Productivity is low. Much of the non-traditional agricultural crops are produced on small farm units in upland areas and on slopes that are subject to erosion
- Only 10% of the farmland under cultivation is irrigated and much of this is devoted to sugar cane and pastures
- Food safety is a rising concern among the Jamaican authorities.
- Competitiveness - many enterprises are not competitive. An early study showed that only six (6) of 16 products studied were competitive. The country needs the analytical capability to keep this type of data current in order to guide investment decisions.
- Institutional Framework. Although, in general, there is an institutional framework to support the development of the sector, certain constraints such as budgetary constraints, deteriorating infrastructure and equipment have prohibited the sector being developed to its full potential. Additionally, models, paradigms and approaches in use for the delivery of

support services are old fashioned and out of date, not reflecting current needs, constraints and opportunities.

- Some support services, especially those dealing with food safety, show duplication, and overlapping functions and activities.

  Regulations and standards need to be reviewed for compliance with WTO

It was against this background that the ASSP was implemented by the Ministry of Agriculture in 2001 to enhance the competitiveness of Jamaican agriculture in domestic and global markets. Originally designed as a 4-year programme, it was eventually extended by just over four (4) years and closed on August 29, 2009.

1.2 PROJECT DESCRIPTION

Source of Funding/Project budget

The original project budget was US$31.5 to be funded in part by a US$22 million loan to the Government of Jamaica from the Inter-American Development Bank (IDB) and a US$9.5 million contribution from the Government of Jamaica (GOJ). A decision by GOJ to reduce the size of its debt resulted in the cutting of the ASSP's Budget by US$6.1 million. The resultant project budget was as follows:

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Project components

The project was implemented through three components viz (See Appendix 1 – Logical Framework for the Agricultural Support Services Project)

Component 1 – Strengthening the Delivery of Agricultural Support Services
Component 2 – Strengthening and Consolidating Agricultural Health and Food Safety Services
Component 3 – Financing selected activities in High Pay-off Productive Projects

1.3 PROJECT RESULTS (Summary)

The results may be summarized as follows:

- **Component 1 – Strengthening the delivery of agricultural support services.**

  Achievements include the following:

  - Provided a cadre of Agribusiness Development Officers to link producers (farmers and agro-processors) and exporters with service providers
  - Provided services to develop Business, Marketing and Strategic Plans, conduct Market Research, develop labels and packaging to meet international standards and deliver training.
    - *No. Support Service interventions – 62*
    - *Cost of providing support services – J$54,500,734*
    - *ASSP: Beneficiary contribution – 90%:10%*
  - Competitive products identified for Investment
  - Market research conducted on Small Ruminants which resulted in implementation of a Sheep Development project. The Jamaica Sheep Farmers' Association was also formed to implement the project.

- Market research conducted to identify markets (local and export) for competitive products
- Upgraded MOA&L Research Stations (Civil works and equipment) – Civil works valued at J$48M completed. Laboratory and field equipment valued at approximately J$6 million provided.
- Training of Ministry of Agriculture staff in Post graduate programmes and short courses – US$226,000
- Training of Farmers – 1,627 farmers trained (surpassing target of 1250)

- **Component 2 – Strengthening and Consolidating Agricultural Health and Food Safety Services**

Achievements include the following:

- Development of Food Safety Policy
- Development of Plant Health Policy
- Draft Animal Health Policy
- Establishment of the National Agricultural Health and Food Safety Coordinating Committee to coordinate agencies involved in food safety
- Establishment of the Plant Health Coordinating Committee
- Establishment of the Animal Health and Welfare Committee
- Implementation of Export/Import Centre (One Stop Shop) at Port Bustamante
- Upgrading Plant Quarantine facilities at Norman Manley International Airport and Sangster International Airport
- Upgrading Plant Quarantine facilities at Donald Sangster International Airport
- Refurbishing of Animal Quarantine Station and laboratories at the Veterinary Services Division facility at Plumb Point
- Implementation of a Pilot project for a National Animal Identification programme

- Implementation of the National Identification and Traceability System (Implementation was based on the success of the Pilot project. Implementation commenced in July, 2009).
- Implementation of a Plant Health Surveillance and Pest Response system
- Training of technical personnel from Ministry of Agriculture, Ministry of Health and Ministry of Industry, Investment and Commerce.
- Procurement of equipment for the Ministries of Agriculture, Health and Industry, Investment and Commerce

- **Component 3 – Financing Selected Activities in High Pay-off Productive Projects**

  Achievements include the following:

  - Twenty four (24) Productive projects identified, developed, approved and implemented
    - Total Project Cost - J$462M
    - ASSPPFL Contribution – J$257M
    - Beneficiaries' Contribution – Cash (loan and equity) and kind
    - Nine (9)Farmers organizations developed and registered
    - Two thousand (2,000) beneficiaries(1,454 male, 546 female)
    - Two hundred and sixty (260) farm workers employed permanently
    - Six hundred employed on a temporary basis

  The Productive Projects cover a wide range of competitive agricultural enterprises e.g. beekeeping and honey, sheep, vegetables, sweet potatoes, condiments (particularly escallion and pepper for the food processing industry), carrot production and processing. There were significant achievements in the productivity of sweet potatoes and escallion. The project also resulted in the development of a sheep industry and a significant improvement in the pig industry.

1.4 Major Lessons Learned

Implementation of the ASSP was very timely given the many challenges that faced the agricultural sector at the time. The major lessons learned include the following:

- Sociological intervention in the farming communities targeted is critical to project success
- Severe time constraints may result from delays in the procurement process
- MOUs are not enough to ensure co-operation amongst ministries and government agencies
- Original time frame for implementation of project was unrealistic
- Lack of easily accessible credit to farmers may have negative consequences for overall project implementation

1.5 Recommendations

Before the implementation of a similar agricultural project the following must be attended to:

- Cultural nuances of sub-sectors need to be identified and relevant strategies employed
- Procurement mechanisms should be formalized
- Competitive advantage of the agricultural sector should be analyzed

2. PROJECT DETAILS

2.1 PROJECT OBJECTIVES AND DESCRIPTION

2.1.1 Summary of objectives

The purpose of the project was to enhance the competitiveness of Jamaican agriculture in domestic and global markets, making a substantial contribution to the goal of increasing the incomes of agricultural producers. This was to be accomplished by developing critical capacities for the delivery of effective agricultural support services; by improving the quality and standards of agricultural commodities produced in Jamaica, as well as those traded internationally; and through the development and implementation of high payoff productive projects in selected rural areas.

It was envisaged that implementation of the Programme will lead to:

- increased enterprise profitability on a sustainable basis;
- increased labor and capital entering to the sector; and
- increased value of exports of a group of agricultural commodities.

The accomplishment of these results and the project's purpose rested on five (5) "principles":

- project investments should be sharply targeted and guided by appraisals of the competitiveness of the enterprises and commodities addressed;
- all activities should be highly participatory and project beneficiaries, organized in groups or associations, should be involved in all phases and functions of the project;
- the project should promote competition among different service providers, including public agencies, NGOs, private firms, and individual technicians;
- the users of some services should have to pay a proportion of their costs, thereby giving them a sense of ownership and encouraging

them to demand good performance from providers and contributing to the sustainability of the project; and

- the project should promote linkages and contracts, between farmer groups and buyers (exporters, processing firms, trading houses), to decrease transaction costs and to improve the access of farmers to financial resources and market information.

2.1.2 Project Components - Details

The project was implemented through three components viz

Component 1 – Strengthening the Delivery of Agricultural Support Services
Component 2 – Strengthening and Consolidating Agricultural Health and Food Safety Services
Component 3 – Financing selected activities in High Pay-off Productive Projects

Component 1 - Strengthening the delivery of agricultural support services to producers

This component was intended to develop critical capacity to deliver agricultural services to producers, chiefly research, extension, and strategic marketing information in an efficient and cost-effective way. The new approach to service delivery had the following characteristics:

- it changed from a supply-oriented, top-down approach to a demand-driven one;
- taking account of government budget constraints, the component helped public agencies focus on a selected set of priority actions, rely on cost-sharing efforts with producer organizations and develop a sound system of fees for cost recovery and project sustainability;

- public agencies did not have the monopoly of service delivery, as they had to compete with private providers (domestic and from overseas) to supply the services demanded by producers and exporters; and
- the new system introduced the Agribusiness Development Units (ADUs) to serve as a bridge between the agricultural support services providers and the producers and exporters in the field.

Component 1 has ten (10) outputs. Through one output, US$1 million was provided through the ASSPPFL to provide funding to support the provision of support services. The following are among the eligible services:

✓ *Extension:*
  - On-farm demonstrations and training
  - Analytical services, e.g. soils, entomology and pathology analyses
  - Technical exchanges, including producer-visits to other local and overseas facilities
  - Environmental management, involving environmental assessments, management systems, and chemical and waste management training
  - Other training

✓ *Marketing*
  - Buyer visits
  - Market visits
  - Packaging and labelling design
  - Business and Marketing plan development

✓ *Land Regularization:*
  - Surveys
  - Title searches

✓ *Research:*
  - Adaptive research, including purchasing new rootstock and establishing pilot plots
  - Product development (e.g. prototype development)

- ✓ *Information:*
  - Production and market studies

Component 2 - Strengthening and consolidating agricultural health and food safety systems

The purpose of this second component was to improve the effectiveness of the animal health, plant health and food safety systems to protect domestic consumers from illness, and domestic production from disease, and contamination while ensuring that Jamaica's exports meet international standards. The component was designed to:

- Strengthen services assuring the coordination and optimal use of expertise and resources of all institutions concerned.
- Assist the GoJ in the development of adequate policies, updating of legislation and installation of the required coordination mechanisms.
- Facilitate the hiring and training of additional personnel, acquisition of field and laboratory equipment, upgrading the infrastructure of laboratories, implementing surveillance programmes and updating methodologies and information systems

Component 2 comprised three sub-components: (i) Animal Health System; (ii) Plant Health System; and (iii) Food Safety System and a total of 37 Outputs.

Component 3 - Selected productive projects for agricultural producers and exporters

The purpose of Component 3 was to increase the competitiveness and profitability of Jamaican agricultural producers and exporters through specific productive projects in different rural areas that address new development opportunities in non-traditional agricultural sectors. US$6 million was allocated to the ASSPPFL the project funds to provide grant

funding to support the implementation of the productive projects. The guidelines for accessing these funds stipulated that:

- ✓ Applicants should be an association of agricultural producers (farmers or processors) and/or buyers (exporters, processing firms or supermarket chains). Individuals are not eligible. Buyers must have a binding contract with an agricultural producer association.

- ✓ The association should have the following characteristics:
    - Be a legal entity;
    - Have documented by-laws and financial statements;
    - Be a non-governmental entity; and
    - Be willing to adhere to the cost-sharing and cost-recovery requirements of the grant.
  - ✓ The project should have the following characteristics:
    - Be focused on a non-traditional market opportunity. A project focusing on traditional commodities will be eligible for financing only if the project focuses on new, value-added products for established markets.
    - Address a clear market opportunity, and
    - Be feasible from a financial, technical, and environmental standpoint and be sustainable over time.
  - ✓ The grant should be used to cover the following:
    - The costs of organizing the association; and includes legal and accounting fees;
    - Costs associated with preparing project proposals;
    - The cost of services; including extension, training, technical assistance, regularization, market analysis, market visits, information collection and other relevant services for the project;

- Shared capital investment costs. Shared capital investments include investments where the benefits accrue to the association and not to an individual.

The maximum grant amount for any one project was US$300,000. There was no minimum grant amount. The maximum cumulative amount for any association was US$300,000.

2.1.3 Project Organization and Management

- **Project Implementation Unit (PIU)**

The executing agency is the Ministry of Agriculture and Fisheries (MoA&F) through a Project Implementation Unit (PIU) under the Office of the Ministry's Permanent Secretary. The PIU was created to coordinate the implementation of the new and transitional model for agricultural support services (from purely public and supply oriented, to mostly private and demand driven). The PIU was comprised of:

- Project Director
- Administrative/Financial Officer
- Accountant
- Technical Officers (3) – each with responsibility for managing one of the three (3) components
- Agribusiness Development Officers (ADOs) (3 initially, then a full complement of 5 by year 3, and 3 at project closure)
- Procurement Officer
- Administrative & Secretarial staff
- Competitiveness Officer
- Sociologist

- ***The Project Steering Committee (PSC)***

  In view of the fact that the Program involved several ministries (MoA, MICT, MoH) and the private sector, a Project Steering Committee (PSC) was created to provide inter-agency coordination, policy guidance, and oversight during the implementation of the Program.

  This Committee was organized at the level of the office of the Permanent Secretary of the MoA with one senior representative from MoH, MICT, the Ministry of Finance (MoF), the Planning Institute of Jamaica (PIOJ) as well as with two members from private sector organizations. Its chairman was the Permanent Secretary, MoA&F. The Director of the PIU acted as the Committee's Secretary.

- ***Technical Review Committee (TRC)***

  The purpose of this committee was to review project proposals to determine whether the project met the requirements of Component 3, particularly in terms of its technical, financial and environmental feasibility and long term sustainability.

- ***Financial Management***

  - Project Budget (Government of Jamaica (GOJ)

    The financial summary presented at Table 1 shows that from the inception of the project in 2000/01 to the completion dated August 26, 2009 a total of J$2,053,898,000.00 was proposed for funding of the project from the GOJ budget, however only J$920,672,000.00 was allocated. Of that amount J$474,220,000.00 was received. It is to be noted that while the budgeted amounts were intended to cover receipts from both IDB and GOJ, the actual receipts were insufficient to accommodate payments to the Consolidated Fund as required in relation to expenditures from the loan (Reference - GOJ Financial Administration and audit Act). As a result of the significant shortfall in

receipts from GOJ, implementation was for the most part very challenging as expenditure was restricted to budgetary allocation. Not withstanding the budgetary restrictions the Project allowed to utilize the Special Account facility for eligible expenditures under the loan.

- Exchange rates

  Due to the agreement between the IDB and GOJ regarding the use of a daily rate between to USD and JD to be supplied by the IDB the GOJ has ended up with a significant amount of foreign exchange loss.

- Computerization of the accounting system

  At the time the project commenced implemented a suitable multi-currency accounting software from which financial statements could be extracted in both United States and Jamaican dollar was not available. The system was therefore computerized by using Peachtree accounting software and Microsoft Excel. In order to maintain the records in dual currency, the accounts of each cost centre had to have two sets of accounts; that is one in USD and the other in JD amounting to six sets of accounts to accommodate the Special Account kept in USD, Agricultural Support Services and Productive Projects Fund Limited kept in JD and the GOJ project account kept in JD.

- Farmer Trainer

  Training efforts in the area of accounting, record keeping and money management were not as successful as was anticipated. This may have been as a result of the low educational standard of some of the farmers, the lack of interest in proper records management and accountability, as these activities were not part of their culture.

AGRICULTURAL SUPPORT SERVICES PROJECT

TABLE 1 - SUMMARY OF FINANCIAL POSITION 2000/01 TO 2008/2009 to AUGUST, 26

J$'000

Year	Estimates Presented		Total proposed estimates	Estimates Approved		Total approved budget	Receipts from MOA	Receipts from IDB	Total Receipts	Actual Expenditure		Total expediture	
	GOJ	IDB		GOJ	IDB					GOJ	IDB		
2000/01		Project preparation facility						6,135	6,135		6,135	6,135	
2001/02	34,951		34,951	14,280	500	14,780	15,182	56,329	71,511	7,049	25,374	32,423	
2002/03	130,245	304,139	434,484	24,940	500	25,440	25,440	49,984	75,424	32,097	82,473	114,570	
2003/04	129,277	302,331	431,608	26,435	4,065	30,500	26,435	97,330	123,765	27,818	96,917	124,735	
2004/05	62,081	144,856	206,937	32,500	40,000	52,415	43,761	122,068	165,829	29,405	121,890	151,295	
2005/06	67,109	156,589	223,698	19,550	65,450	85,000	66,443	113,071	179,514	39,873	140,348	180,221	
2006/07	34,821	136,437	171,258	24,000	69,513	93,513	61,863	120,350	182,213	65,250	100,842	166,092	
2007/08	79,374	177,457	256,831	79,374	247,904	327,278	113,465	138,614	252,079	72,893	138,661	211,554	
2008/09	152,916	164,986	317,902	144,219	138,527	282,746	112,631	184,228	296,859	75,673	280,687	311,188	Unaudited
2009/10	11,180		11,180	9,000		9,000	9,000	196,206	205,206	83,864	189,877	258,774	Unaudited
TOTAL	**667,003**	**1,386,795**	**2,053,898**	**374,298**	**566,459**	**920,672**	**474,220**	**1,084,315**	**1,558,535**	**433,922**	**1,183,204**	**1,617,126**	

The Project was also designed with some unique features to facilitate achievement of its objectives. These included the following:

- ***Agribusiness Development Units***

  These were strategically placed regionally to better serve the project's clientele. They were based in the MoA&F/Research & Development Department at Bodles, and the RADA offices in Mandeville and Montego Bay. They formed the bases from which Agribusiness Development Officers (ADOs) operated. The ADOs diagnosed problems, identified opportunities, solved problems that were within their reach, and organized and secured the delivery of support services.

- ***The Agricultural Support Services and Productive Projects Fund Ltd, (ASSPPFL)***

  The ASSPPFL is a wholly owned Government of Jamaica company that was incorporated under the Companies Act in 2001. The Company was established to mobilize and manage a pool of funds, made available by the IDB, to enhance the competitiveness of Jamaica's agriculture in domestic and global markets. It was managed by the Agricultural Support Services Project (ASSP) through which funds were provided to finance both the provision of agricultural support services and selected activities in high pay-off Productive Projects. The Operating regulations for the ASSPPFL describe the procedures for application, approval, and disbursements of grants, including eligibility and selection criteria.

  Beneficiaries were required to provide a minimum of 10% of the grant amount under the ASSPPFL's cost sharing requirement for the provision of agricultural support services. Beneficiaries under

Component 3 of the project were required to provide a minimum of 20% of the grant amount for shared capital investments.

The company was established with wide ranging powers that include, *inter alia*, the following:

- To receive contributions or donations of funds and resources from international or national sources and to invest such funds and resources in such projects, ventures of activities as may be determined from time to time
- To advance or lend money for the purposes of carrying out the objects of the company
- To provide financial assistance, as appropriate, to organizations for establishment, carrying on or expansion of development enterprises
- To borrow or raise money (with approval of the Minister of Finance)
- To invest the capital and funds of the Company in any fixed income securities issued by the GOJ or any reputable financial institution

The strategy for sustainability of key ASSP initiatives involves the retention of the ASSPPFL. Cabinet has given approval for the Fund to be merged with the Agricultural Development Corporation to form a new entity, the Agro Investment Corporation. The new entity is responsible for promoting and facilitating investment in agriculture.

- ***Procurement of Support Services***

Guided by the principle that the `client is king' and should be provided with the best possible service, the project promoted competition among different service providers, including public agencies, NGOs, private firms, and individual consultants. In this regard, MOUs were established with public and non-public service providers for the

delivery of support services and selection for each assignment was based on a competitive bidding process.

Producers were thus able to apply to the PIU to receive funding from the Agricultural Support Services and Productive Projects Fund (ASSPPFL) to pay for services. The PIU selected the service provider in collaboration with the beneficiary, who payid a minimum of 10% of the grant amount. The PIU monitored the provision of services financed by the grants and evaluates benefits derived from the services.

- ***Mechanisms for Program execution*:**

The food safety sub-component in Component 2 involved Agencies/Divisions under MoA&F, MoH and MIIC. In order to ensure coordination and establish responsibilities among participants an inter-ministerial Memorandum of Understanding (MoU) was signed by the Ministries.

2.1.4 Changes since approval

The following changes were made after approval of project:

- Partial loan cancellation
- Extension of the implementation phase of the project
- Procurement Management

2.2 PROJECT RESULTS

2.2.1 Rationale for changes since project approval

- *Partial Loan Cancellation*

Implementation of the ASSP was initiated in February 2001, and at June 2005, or 52 months later, it had disbursed only US$7.2 million (33% of total original loan amount) due to the reduced budget allocations provided by the Ministry of Finance during that period. As the original execution period was established for four years (up to February 2005), the GoJ and the Bank agreed in late 2004, to extend the date for last disbursement of the Loan up to February 21, 2008, but also to reduce the amount of the Loan by US$ 4.2 million (new total loan amount was reduced to US$ 17.8 million), and therefore, the estimated total cost was also reduced, accordingly, to US$ 25.4 millions. That decision was taken by the GoJ on financial grounds seeking for the reduction of the external financial constraints that were severely affecting the fiscal situation of the Government.

- *Extension of the Implementation of the Project*

Based on the partial loan cancellation above, the Project Implementation Unit (ASSP/PIU) had to revise the work plan for the completion of the project by encompassing the period March, 2005 – February, 2008. A rescheduling of activities was done in order to achieve the goals of the project in keeping with the reduced available funds. The revised workplans were approved by GOJ and the IDB.

- *Procurement*

The original intention was for procurement of goods to be conducted by the MoA, but the PIU deemed it expedient to establish a small unit within the PIU for this purpose.

The GOJ and IDB Procurement guidelines were, however, adhered to.

2.2.2 Results Achieved

The major achievements are presented below

Results of Component 1

- Mechanism for the identification and prioritization of strategic commodities and regions

  In recognition of the fact that globalization has brought the issue of competitiveness to the fore, the ASSP team included a Competitiveness Officer whose responsibility it was to conduct the necessary studies to guide investment. Among the enterprises identified to be competitive were hot pepper, escallion, sweet potato, honey, pigs, sheep and mutton, tilapia and rice. The ASSP therefore focused on promoting and facilitating production of these. Additionally, the initial competitiveness studies prompted the revitalization of the following industries:

  - ✓ *Tilapia* - Study on Tilapia resulted in a project being submitted to European Union funded Private Sector Development Project that is managed by Jamaica Trade and Invest for funding to facilitate development of the Aquaculture sub-sector. The project was approved and the ASSPPFL co-funded one output, the market study.

  - ✓ *Rice* – A study resulted in development of a project to resuscitate the rice industry in Jamaica. A variety trial was established and the MOA&F partnered with a private sector company, the Jamaica Broilers Group, to establish 25 acres of rice at Amity Hall in St. Catherine. This was harvested in July, 2009.

  - ✓ *Pineapple* – observation plots of MD2 the world's leading fresh fruit variety were established in St. Mary, Clarendon and St. Elizabeth

- Feasibility Studies & Market research conducted

The implementation of recommendations emanating from Feasibility Studies and Market Research has charted the path for the development of several industries/companies. Among these are the following:

- ✓ A Marketing Plan developed for the Ornamental Fish Industry provided a plan for development of the industry

- ✓ A study of the feasibility of the Small Ruminant Sector in Jamaica resulted in the formation of the Jamaica Sheep Farmers Association and implementation of a Sheep Development project. The Abattoir at Bodles was refurbished at a cost of J$10 million to facilitate production of value added products which are being marketed to high-end hotels

- ✓ Market Survey for Shrimp in local and overseas markets – provided the Jamaica Agricultural Development Foundation with data to support expansion of shrimp production

- ✓ Market Research on Juices and flavoured milk enabled the Jamaica Citrus Growers Association the launch an aggressive marketing campaign in an effort to regain market share

- ✓ Market research for table and liquid eggs conducted on behalf of the Jamaica Egg Farmers Association (JEFA). Results of the study contributed to JEFA's decision to invest in the establishment of a Liquid Egg processing plant in Montego Bay

- Funding for agricultural support services

Agricultural Support Services and Productive Project Fund Limited (ASSPPFL) a wholly owned Government Company was established. Services providers with whom MOUs were established provided services to, *inter alia*, develop Business, Marketing and Strategic Plans, conduct Market Research, develop labels and packaging to meet international standards and deliver training. (See Table below for a summary of the types of service interventions).

Grant funding was provided through the Agricultural Support Services and Productive Projects Fund ltd. (ASSPPFL) on a cost sharing basis in which beneficiaries contributed at minimum of 10% of the cost of the service. The maximum grant amount was US$30,000

i. *No. Support Service interventions - 62*
ii. *Cost of providing support services – J$54,500,734*
iii. *ASSP:Befeficiary contribution – 90%:10%*

Summary - Support Service interventions provided with funding from the ASSPPFL

Category of Service	**No. of Support service interventions**	**Value of Service Interventions (J$m)**	**Percentage (%) of Total Value**
Artwork for labels & promotional material	12	10.1	18
Business Plans, Strategic Plans, Project proposals	15	12.3	23
Marketing plans & promotion	14	15.6	29
HACCP Audits & Implementation	7	3.5	6
Research & Analytical services	5	5.0	9
Training	5	2.0	4
Technical Assistance , factory & farm layout	4	6.0	11
TOTAL	**62**	**54.5**	100

A detailed list of Support Service interventions detailing the names of the service providers names of beneficiaries and cost of the services is provided is presented at Appendix 2.

- Improvement to MOA&F Research Stations

Under component 1 a total of J$60,477,903.00 was spent to make improvements to Research Stations:

Description of Work	**Value of Contract (J$M)**
Montpelier Research Station	
▪ Refurbishing office and farm buildings	3,253,872
▪ Irrigation System	911,592
▪ Rehabilitation of Pastures & Fencing	2,488,932
Bodles Research Station	
▪ Rehabilitation of domestic well	5,861529
▪ Refurbishing of Main building	7,270,252
▪ Clearing land at South Bodles for forage production	704,000
▪ Refurbishing goat pen	1,680,264
▪ Installation of PBX (telephone) System	2,043,442
▪ Repairing crop research greenhouses	2,406,060
▪ Rehabilitation of irrigation distribution system	10,059,803
▪ Refurbishing Abattoir	9,467,558
▪ Irrigation System – installation at South Bodles for forage production	11,131,995
Orange River Research Station	0
▪ Refurbishing main building	9,853,000
TOTAL	**60,477,903**

- Procurement of Equipment and supplies

Vehicles, computers and related software, audio visual equipment and accessories, extension field kits, field equipment, and office equipment were acquired for RADA and the MOA, including ARDD, the Marketing and Planning Divisions. Laboratory and field equipment valued at approximately J$6 million was provided.

- Training - Technical Personnel

  - ✓ *Short Courses* – 172 officers of RADA and MOA&F trained in 16 short courses. Cost of training– US$86,528
  - ✓ *Post graduate training* – Funding provided for 10 (ten) members of MOA staff and one (1) member of RADA staff. Seven (7) have been awarded post graduate degrees, one of which was at the PhD level. Cost – US$126,242
  - ✓ *Undergraduate training* **–** one (1) member of RADA staff and three (3) members of MOA were assisted to pursue first degrees. Cost - $68,326

- Training Producers

  The receptiveness of farmers in adopting improved technologies is a critical aspect of enhancing competitiveness, and as such the training of farmers was an ongoing activity.

  The focus was on the groups that are implementing Productive Projects and in this regard, 1,627 farmers were trained in not only crop and livestock production practices but also in sociological issues aimed at strengthening the groups to facilitate sustainability.

Results of Component 2

- **Agricultural Health Policies established**

Food Safety Policy

Cabinet gave preliminary consideration to the Food Safety Policy. The Food Safety Policy was developed through a consultancy commissioned by the ASSP at a cost of $3,990,000.00. The Policy objectives are:

- ✓ To have a system in place that will enable traceability of food from producer to consumer
- ✓ To institute a system that will enhance Jamaica's risk management capability
- ✓ To upgrade the current system for administering international agreements with respect to food safety
- ✓ To streamline institutional arrangements for efficiency and effectiveness
- ✓ To promulgate a modern food safety umbrella legislation
- ✓ To institute an appropriate institutional arrangement for accreditation
- ✓ To establish systems that will ensure food produced by farmers is safe for consumption
- ✓ To establish systems that will ensure that food sold to the public by vendors, restaurants and processors is safe
- ✓ To establish a coordinating mechanism for food safety activities

Policy recommendations include:

- ✓ Farmers shall be responsible for producing and selling safe food to the public. The government shall institute a food safety monitoring system to ensure that only safe food is available to the public.

- ✓ Importers of food shall be responsible for the safety of food brought into the island for sale to the public. The government shall strengthen the current system for monitoring the safety of imported food and for enforcing the current regulations.
- ✓ Government shall establish a Food Safety Secretariat for a two year period. The Secretariat will initiate the development of updated food safety standards and regulatory processes, finalize umbrella legislation and prepare a detailed Food Safety Programme. At the end of the two year period an evaluation will be done in order to decide if regulatory functions should be added to the FSA Secretariat.
- ✓ Government shall establish systems that facilitate traceability from farm to fork. Adequate procedures to facilitate the traceability of feed and food and their ingredients shall be introduced. These include the obligation for feed and food businesses to ensure that adequate procedures are in place to withdraw feed and food from the market where a risk to the health of the consumer is posed. Operators shall keep adequate records of suppliers of raw materials so that the source of a problem can be identified.

Plant Health Policy

Through the initiatives of the ASSP, the Economic Planning Unit of the Ministry of Agriculture and Fisheries and Plant Health Coordinating Committee (PHCC) developed a Draft Plant Health Policy. The vision of the Policy is the establishment of a coordinated, sustainable and international compliant plant health system that enhances Jamaica's plant health status, thus fostering consumer, plant and environmental health and food security. The Policy goals are:

- ✓ Improved plant health system in accordance with international standards and obligations
- ✓ Harmonized plant health legislative, regulatory and institutional frameworks
- ✓ Facilitation of the development of systems that prevent the introduction and spread of harmful alien pest species
- ✓ Promotion of the use of environmentally friendly and sustainable plant protection strategies to maximize agricultural productivity, quality of food and acceptance of imports by trading partners while reducing agricultural losses caused by pests
- ✓ Protect the natural environment from the harmful impact of invasive plant pests and
- ✓ Increase public awareness and role of stakeholders in protecting plant health.

The recommendations include:

- ✓ Government will amend the Plant Quarantine Act (1993) to designate the Plant Quarantine/Produce Inspection Unit as the National Plant Protection Organization (NPPO).

- ✓ Government will enact the appropriate legislation to give legal authority to the Plant Protection Unit, Rural Agricultural Development Authority and Customs Department to provide complementary plant health services to the NPPO.

The Government is conducting a comprehensive review of the existing Plant Quarantine Act (1993) and its Regulations with a view of amending it to ensure compliance with WTO-SPS standards and IPPC guidelines. Therefore updated legislation will include the enquiry point, notification procedures, and guidelines for control/eradication of pests or inspection/approval procedures, establishment of pest free areas or emergency pest response authorities.

Government is in the process of drafting a new regulation to the Pesticides Act (1975) to prescribe the maximum residue levels of pesticides on crops.

Animal Health Policy

The ASSP collaborated with the Veterinary Services Division and the Economic Planning Division to produce the first draft of the Animal Health Policy. This is being reviewed by internal stakeholders.

- **Coordination Mechanisms established**

  - ✓ National Agricultural Health and Food Safety Coordinating Committee (NAHFSCC)

    The National Agricultural Health and Food Safety Coordinating Committee (NAHFSCC) was established in 2001 and comprises senior officers from the government and private officers. The Chairmanship of the NAHFSCC rotates annually amongst the Ministries of Agriculture, Health and Investment, Industry and Commerce. The chairman of the NAHFSCC was nominated by the Permanent Secretaries of the relevant ministries. The Committee met on a monthly basis to review pertinent food safety issues.

    The ASSP through focus group discussions and seminars developed and documented a MOU amongst agricultural health and food safety regulators. The MOU was signed in 2005 and the sub-committees emanating from the MOU functioned effectively. Joint work plans were developed by these sub-committees and this has initiated enhanced team work in areas such as inspection, sampling and surveillance.

- ✓ Plant Health Coordinating Committee (PHCC)

  The ASSP through an internal consultancy facilitated the development of the Plant Health Coordinating Committee (PHCC). The PHCC which was established in 2004, it comprises representatives of government agencies, UWI and Commodity boards. The development of this committee was of significance as it has provided a forum to discuss plant health issues on a national scale.

  An MOU was signed in 2005 by three Ministries; Agriculture and Fisheries; Health, Industry, Investment and Commerce. It clearly defines roles and responsibilities of each agency in an effort to address gaps and overlaps in the agricultural health and food safety sector.

- ✓ Animal Health Coordinating Committee (AHCC)

  The Animal Health Coordinating Committee (AHCC) was formed in 2002. The aim of the committee is to establish and maintain a mechanism for the dissemination and exchange of information on animal health including its impact on production systems, trade and food safety for the purpose of educating stakeholders, improving Jamaica's competitiveness in livestock production and advancing food safety and security.

- ➢ Improvement to Animal and Plant Health facilities

Under the Plant Health Sub-component over J$65,000,000 was spent on civil work activities which had a tremendous impact on national development. The following civil work activities were undertaken:

- ✓ Construction of a Cold Room Facility at the Export Complex in Montego Bay was completed at a cost of $22,768,729.36. Currently a chill room is being installed at a cost of $10,300,000.00 and will be completed by the end of October, 2009. These improvements will impact positively on the country's export market. It is expected that a cold storage facility will result in a 60% - 70% increase in the export of the three main commodities that require such facilities - breadfruit, pepper and callaloo.
- ✓ Phase Two - Expansion of the Norman Manley Warehouse is being extended at a cost of J$17,400,000.00. This work will be finalized in October, 2009 and will result in an additional three thousand four hundred square feet (3,400 sq. ft) of warehouse space. The additional space is required to improve the handling and preparation of agricultural export.
- ✓ Inspection Office constructed at the Montego Bay Port at a cost of US$22,000
- ✓ Fumigation shed constructed and secured at the Export Complex, Montego Bay at a cost of US$20,000.00. Prior to 2001 exporters in the Western Region were not able to access some USA markets that did not offer fumigation services at their ports of entry and transporting their produce to Kingston was not profitable. This facility provides tarpaulin fumigation for pepper, yam and thyme going into the United States of America as well as wood packaging material used in international trade. There has been significant increase in the exports from Montego Bay since the building of this facility. Exporters are now able to capitalize on the lucrative United States of America market for commodity requiring fumigation. Since January 1, 2002 to July 2009 over six hundred thousand (600,000) boxes of produce were fumigated.
- ✓ Refurbishing of offices at the Export Complexes in Kingston and Montego Bay. According to the Chief Plant Quarantine Officer this

refurbishing has meant that the Ministry has two state-of-the-art export complexes at both international airports where all the services related to the export of fresh produce are offered. The facilities are recognized as the best in the Caribbean region and as such The Quarantine Division hosted three study tour/attachments for plant quarantine staff in the region.

- ✓ Repaving of the road at the Montego Bay Complex at a cost of US$9,000.
- ✓ Implementation of Export/Import Centre (One Stop Shop) at Port Bustamante

  The ASSP played a pivotal role in the establishment of the One Stop Shop at the Kingston port. The role of the Centre is to provide highly effective coordinated customer service and administrative support in a modern, customer friendly environment for clients. The One Stop Shop has brought together all the regulatory agencies:

  - ✓ Plant Quarantine/Produce Inspection
  - ✓ Veterinary Services Division
  - ✓ Environmental Health/Public Health
  - ✓ Pharmaceutical Division
  - ✓ Pesticide Control Authority
  - ✓ Bureau of Standard
  - ✓ Food Storage and Prevention of Infestation Division

Animal Health

A total of J$24,942,856.00 was spent on civil works under the animal health sub-component. The following activities were undertaken:

- ✓ Refurbishing of the Animal Quarantine Station at a cost of J$17,033,556.25. The refurbishing of the Quarantine Station has ensured that Jamaica meets the requisite international and national phytosanitary standards.

- ✓ Construction of a central laboratory and identification room at a cost of US$57,500.00. This has eased the problem of overcrowding and enhanced customer service at the Veterinary Services Division (VSD).
- ✓ Refurbishing of the Monitoring Residues Unit at a cost of J$3,481,800. This activity will contribute significantly to the accreditation process being pursued by the VSD. The expansion of the laboratory has provided more space for much needed equipment.

- ➢ Implementation of a National Animal Identification programme

The ASSP has been instrumental in the establishment of an animal identification programme for Jamaica. In 2005, the ASSP facilitated a consultancy which examined the feasibility of implementing a national identification programme in Jamaica. This consultancy culminated with a pilot programme being implemented in 2006. A total of 3047 cattle were tagged in parishes of St. Thomas, St. Mary, St. Ann, St. Catherine, Clarendon and St. Elizabeth. Based on the pilot programme a working group was formed to initiate plans to have a national programme implemented. A contract in the sum of EUR One Hundred Ninety Thousand One Hundred Ninety Six (€199,196.00) was signed between the Ministry of Agriculture and Fisheries and the ADT Projekt GmbH. The contract commenced July 5, 2009 and will continue for fifty (50) weeks.

The objective of this consultancy is to guide the Ministry of Agriculture in the implementation of a national animal identification system for Jamaica. The activities of the consultancy include the following:

- ✓ Defining and documenting the proposed national animal identification system. The current focus is on cattle; however, the prototype developed must be applicable to other species of farm animals.

- ✓ Determining the economic cost and impact of the national animal identification system with recommendations for financing.
- ✓ Assisting in the drafting of appropriate legislation and regulations aimed at facilitating the national animal identification system.
- ✓ Designing a detailed implementation plan for the national identification system.
- ✓ Guiding the initial start of the tagging process in at least two species

The long term impact of the programme will be tremendous as the following outcome is expected :

- ✓ Identification and registration of all livestock in Jamaica
- ✓ Implementation of a computerized database system inclusive of passports and tags which will be able to trace animals from birth to slaughter
- ✓ Establishment of database system with ability to store and generate vital information on domestic animals
- ✓ Implementation of traceability system which would facilitate tracing meat from farm to fork

- Training of technical personnel from Ministry of Agriculture & Fisheries, ministry of Health and Ministry of Industry, Investment and Commerce

Rural Agricultural Development Authority

Between 2006 -2009 the entire complement of the extension staff (Area Extension and Agricultural Assistants) were trained in the area of pest recognition. These officers' capacity to recognize pest problems such as red palm mite and pink hibiscus mealybug has improved. Officers are now able to make appropriate recommendations and this has led to increased crop yield and a decrease in cost of production. Additionally, officers are now better equipped to train farmers.

Plant Quarantine/ Produce Inspection Unit (PQ/PI)

The PQ/PI Unit benefited tremendously from the training interventions facilitated and funded by the ASSP. The training programmes enabled PQ/PI to establish a WTO/SPS Enquiry Point as well as a Pest Risk Analysis Unit. Based on training received officers were able, with the help of an engineer, to design a portable volatilizer which is currently being used in the Montego Bay Facility for off-site fumigation. By so doing, purchase of a commercial volatilizer was unnecessary and has resulted in savings of thousands of dollars. Training of these officers has allowed Jamaica to become compliant with the standards of its trading partners. Through the training received, the Plant Quarantine/Produce Inspection Unit was able to adequately prepare by overseeing the establishment of the required certification for a heat treatment and two (2) Methyl Bromide fumigation facilities and was ready for the implementation date set out by our major trading partners. This is a major achievement for Jamaica as it is the only CARIFORUM country that has these facilities.

Research and Development Division

The technical capacity at the Research and Development Division was strengthened by local and international training facilitated by the ASSP. An officer of the Research and Development Division was sponsored to attend a workshop on the Red Palm Mite. Subsequent to the training, the Red Palm Mite was discovered in Jamaica. The training allowed the officer to accurately identify the pest and implement management strategies. The officer was able to train individuals from Research and Development, RADA, Plant Quarantine and Inspection Unit, Coconut Board and USDA to identify the pest in the field. On the request of the USDA, the officer was asked to train officers in Antigua

and St. Kitts and Nevis on Red Palm Mite Management. The officer is also the chairman for the CARICOM technical working group on Red Palm Mite. The Plant Protection Unit is now part of a regional effort to manage the pest in the region.

One officer from the Research and Development Division reported that the training she received in Plant Protection and Inspection Services enabled her to participate in consultation on the draft International Standard for Phytosanitary Measures (ISPM). She also noted that knowledge gained on the programme assisted in her promotion from Senior Plant Protection Officer to Chief Plant Protection Officer.

It should be noted that the Plant Protection Unit is in the process of establishing a Molecular Laboratory and information garnered from the course will be applied regarding the identification of plant pathogens.

Veterinary Services Division (VSD)

The technical capacity of the VSD officers were strengthened through training in Hazard Analysis and Critical Control Points (HACCP), laboratory techniques and diagnosis, virus and bacteria isolation and risk analysis

- Enhancement of technical capabilities through procurement of equipment

Over J$54,615,837.22 was spent on the procurement of equipment and supplies for the various units and departments in the Ministries of Agriculture and Fisheries, Health and Industry, Commerce and Investment.

As part of the plans to ensure that Jamaica meets the required national and `international phytosanitary and environmental standards an incinerator was procured. Located at Plumb Point near the Norman Manley International Airport, this piece of equipment is being used by the Veterinary Services Division and the

Plant Quarantine/Produce Inspection Unit to destroy contraband material. Installation of the equipment and training of Ministry of Agriculture personnel in its operation and basic maintenance was completed by the manufacturer in September, 2003.

Since the inception of the ASSP, laboratory equipment and supplies such as Binocular Compound and stereo-zoom microscope, centrifuge, fume-hood, pH meter, laboratory incubator, dissecting kits, cooling chest, desiccators and glass distillation apparatus were procured for the Research and Development Division.

Under the Plant Surveillance System microscopes, digital cameras, GPS tools and laminators were delivered to RADA and the Plant Quarantine/Produce Inspection and Research and Development Divisions. Approximately ten (10) desk top computers and three (3) laptop computers were supplied to the Plant Health Divisions of the Ministry of Agriculture in order to strengthen data gathering and surveillance procedures.

The VSD received laboratory equipment and supplies such as microscopes, fume hoods and refrigerators. Diagnostic test kits were procured for VSD and this has aided the division to achieve the mandate set by the OIE and international communities for the surveillance of animal and zoonotic diseases such as Avian Influenza and Leptospirosis. The acquisition of laboratory equipment has enabled the VSD to be better prepared to apply for ISO17025 accreditation status from the Swedish Accreditation Board in October 2008.

Approximately twenty-two (22) desk top computers and other information technology equipment was procured for the VSD. This has enabled the VSD to become a part of the Government of Jamaica mandated Trade Facilitation System. The acquisition of computers, printers, wireless apparatus and other hardware has allowed the VSD to simplify the import and export process and has cut the waiting time from around 5-7 working days to approximately 48 hours.

The acquisition of information technology equipment has also allowed the staff to have access to online research materials through the internet.

Results of Component 3

The ASSP initiated a total of 24 projects and made a contribution of US$2,995,656.00 (J$ 236, 656,824.00). ASSP's contribution was used to provide the groups with shared capital items such as:

- ✓ Farm equipment
- ✓ Irrigation supplies (from water source to farm gate)
- ✓ Civil Works (chill room, export facility complex, honey processing plant, packaging/storage and office facilities)
    - Nurseries
    - Laboratory equipment
    - Refrigerated truck
    - Road repairs
    - Breeding stock (sheep)
    - Tractors

Some of the highlights of Component 3 are as follows:

- ***Pig Industry Improvement Project/Newport Genetics Ltd.***
    - A partnership between the ASSP, Newport Mills (local private sector company) and Donaldson International (Canadian supplier of improved genetic stock)
    - Project is aimed at reducing the cost of production of pork Achievements include the following:
        - Improvement production and quality parameters - litter size, birth weight, ratio of meat to bone, back fat and marbling. The fact that there was no importation of hams during 2008 is testimony to this. Additionally, pork processors have

attested to the improved quality of the pigs being presented for processing

- Availability of semen and an artificial insemination service – this is offered through the project and facilitates upgrading the quality of the farmers' animals

- ***Sheep Development Project*** – this project was developed primarily to address the unsatisfied demand for mutton (sheep meat), particularly for the high value cuts required in the hospitality industry. Achievements:
  - Development of a sheep industry. Formerly sheep were mainly used as `mowers' to control the growth of grass on aquaculture farms
  - Improved quality of mutton from breeding programme using imported Dorper rams to upgrade the local stock.
  - Improved weight gains
  - Import substitution - High value cuts marketed to two high end hotels.

- ***Sweet Potato production***
  - Control of the major pest affecting sweet potato through implementation of Integrated Pest Management and improved agronomic practices.
  - Increased yields – Yields 14,000 – 15,000/acre vs. 8,000 lbs/ac previously
  - Cost of production reduced from $12/lb to $8.40/lb over an 18 month period between 2004 and 2006
  - Increased incomes for farmers particularly those in the Pedro Plains Producers Association & Thetford Small Farmers Cooperative

- ***Escallion production***

Two high yielding varieties (Hardy Evergreen and the White Spear were imported and introduced to farmers in ASSP-assisted projects. Achievements:

- Increase in volume of escallion produced
- Year round production through the use of irrigation, thereby reducing seasonality in production
- Increased yield – six fold increase in yield experienced
- Import substitution – there has been a significant reduction in the volume of escallion imported for use in the agro-processing industry.
- Technology transfer - farmers outside of the ASSP assisted projects have adopted the varieties and the technology package used by the participants in the ASSP-assisted projects

- ***Hot Pepper production***

Having identified that the availability of adequate and consistent supplies of suitable raw material has often been cited as one the main constraints to the development of the food processing industry. One of the main items required is hot peppers, for hot pepper sauces, jerk sauces and seasonings for which there is unsatisfied demand. Investors are being facilitated to establish this crop and recently a contract valued at close to half a million dollars has been secured with a major condiment processor for the supply of hot peppers. Some 13 nurseries were established to supply the seedlings for this project

A list of the Productive Projects detailing the name of the beneficiary group, the type of project, project cost, ASSP and beneficiaries' contribution is presented at Appendix 3.

2.2.3 Differences Between Planned and Actual Results

- *Competitiveness Studies*
  - ✓ Planned result – Staff of the MOA's Planning Division would be trained to detect competitiveness by region, commodity, and producer type using specialized software and (largely) secondary data.
  - ✓ Actual result – A full-time Competitiveness Officer was employed as it was recognized that the issue of competitiveness was a major challenge and required urgent and sustained intervention to facilitate the project achieving its mandate of `enhancing the competitiveness of Jamaican agriculture' Competitiveness reports were produced and seminars held to present the findings. Staff of the Planning Division and other relevant persons were invited to participate in the seminars.

Training of producers

- ✓ Planned result – producers trained in social organization
- ✓ Actual result – It was recognized that the producers required more than training in social organization. ASSP therefore developed and delivered a comprehensive programme of sociological intervention. Each productive project was assigned a sociologist who monitored the group's development. Additionally, the Sociologists organized training in production practices relevant to the needs of the groups. Much of the training in agronomic practices was delivered by officers from RADA.

2.2.4 Unplanned Outcomes

Agri Stakeholders Association

The non-traditional crop sub-sector has had a long history of serious marketing problems. For the most part, inadequate dissemination of marketing information,

the absence of coordinated marketing programmes, inadequate or poor marketing infrastructure, including post-harvest handling facilities and unsuitable means of transportation have been the major deficiencies of the non-traditional agricultural marketing system. Too often there is glut or shortage of agricultural produce on local markets, depriving farmers of vital revenue. Additionally, due to the lack of a structured and organized farmers' marketing system, buyers often face difficulty in obtaining adequate supplies to fill orders. The loss of revenue significantly reduces the viability of any enterprise and threatens its sustainability.

Through the initiative of the Agricultural Support Services Project (ASSP**)** and with financial assistance of the Inter-American Development Bank, Multilateral Investment Fund**,** an Agricultural Marketing Project (AMP) was established in order to address the marketing challenges being faced by both farm group producers and buyers. The project was designed to enable producers and buyers to communicate timely and meaningfully. Through the system of production based on market demand, farmers realized greater profitability. The executing agency for the project was the Agri-Stakeholders' Association (ASA), an umbrella organisation with the mandate of organising marketing activities of producer groups.

In a bid to strengthen the marketing opportunities for ASA and its group members the following activities were undertaken:

- ***Implementing ISO 9001:2001-*** This will not only improve efficiency and professionalism of the farming groups involved as it relates to standardisation of practices and procedures but, implementation of ISO will also open the doors of engaging new markets both local and overseas. Several farmers who are implementing Productive Projects were trained and exposed to the benefits and the roles associated with being ISO 9001 certified. This initiative is being continued by the Agro Investment Corporation

- ***Website Development and Computer Database Programme*** was undertaken in order to enhance members' effectiveness in communicating with buyers and in the same breath attract new markets via the internet. The website was completed and tested internally to accurately facilitate the intended usage. The system is being incorporated in the Ministry of Agriculture and Fisheries marketing system.
- ***Training of Farm Group Members –*** this is critical to increasing the capacity of the organisation and the personnel involved. ASA purchased and distributed several computers to farm groups to further facilitate the integration of technology into ASA's operation and by extension how member groups do business. Key farming group members were trained in Computer Application, Marketing, Post Harvest Technology and other related areas, it is the intent that these members will pass on the acquired knowledge throughout their various group members.

  As the Agri-Stakeholders' Association Ltd strives to strengthen its capacity and that of the producer group members it is anticipated that ASA will evolve into becoming a key player in the marketing of Jamaica's agricultural produce. In this regard, The Agro Investment Corporation will facilitate further implementation of the AMP.

Investment Centre

The Investment Center in the ASSP, was one of the approaches proposed in the Exit Strategy as a service to be provided by a specific unit in the Ministry. Its formation was accelerated in order to respond to the numerous enquiries that emanated from a number of Road Shows hosted by the Ministry to promote investment opportunities in agriculture. It was recognized then that the need for such an entity was urgent. The unit was formally established in 2007, to assist clients who are often faced with challenges as they attempt to navigate the procedural landscape to

access financing or identify and develop viable production activities. The primary function was investment promotion and facilitation through the provision of investment advice, business counseling, technical and marketing support service and preparing Business Plans and Proposals for submission to the appropriate funding institutions.

The Business Plans developed have been in the area of Livestock, small ruminant (sheep and goat), condiments, root crops, poultry and ornamental fish. Individuals continue to demonstrate an interest and to facilitate greater coverage, the officers have been going to community fora, both urban and rural, as well as tertiary agricultural institutions, in an effort to adequately service their needs. The functions of the Investment Centre have been incorporated into the Project Development Department of the Agro Investment Corporation.

2.2.5 Aspects that have minimal chances of being achieved

Funding was removed from activities such as the updating of methodologies and the enhancement of laboratory practices. This was done because another project, the National Quality Infrastructure Project (NQIP), like the ASSP, had outputs related to accreditation of laboratories. The ASSP received regular updates on the status of implementation of the NQIP. It should be noted that although the laboratories will not receive international accreditation during the implementation life of the ASSP the process has commenced and is being spearheaded by the newly established Jamaica National Agency for Accreditation.

2.2.6 Impact of External Consultant Services

External consultant services made a significant impact on the implementation of some of the activities of the ASSP. Through the use of external consultants the following were achieved:

- ✓ Implementation of Plant Health Surveillance and Pest Response Systems
- ✓ Revision of Plant Health Methodology at the Plant Quarantine /Inspection Unit
- ✓ Completion of an Animal Identification Consultancy which showed that it was feasible to have a national island-wide system for Jamaica
- ✓ Implementation of a Pest Risk and Insect Taxonomy and Identification Programmes
- ✓ The conducting of Market research on Shrimp, Ornamental Fish, Tilapia, Fresh and Processed agricultural produce

2.2.7 Internal Level of Economic Return

The ASSP realized an internal level of economic return from the activities of its own staff, the wider staff of the Ministry of Agriculture and Fisheries and RADA. The following activities contributed to internal level of economic return:

- ✓ Completion of eighty (80) business plans by the investment officers
- ✓ In terms of technical training; staff members from Research and Development Division and RADA were utilized in training programmes
- ✓ Sociological training aimed at strengthening group development. Various elements of group dynamics training were taught by sociologists employed by the ASSP and this prevented the government from expending millions to engage the services of consultants.
- ✓ The sociological intervention played a critical role in preparing the groups implementing Productive Projects to function as sustainable agri business entities. A detailed report of this intervention is presented at Appendix 4

- ✓ Agribusiness Development Officers (ADO) prepared most of the proposals for the Productive projects and this resulted in considerable savings when compared with the originally planned use of consultants. The ADOs were adequately prepared for this role through training that was arranged early in the life of the project. The saving realized was directed into implementation of the productive projects.

2.3 LESSONS LEARNED FROM THE PROJECT

2.3.1 Design

The Logical Framework for the ASSP is a rather complex one with a large number of outputs (51) and outcomes (6 initial, 1 intermediate and 1 end), not all of them very clearly linked and well-related. In fact, while the relationship between the purpose and the goal of the ASSP, that is to say, between intermediate and end outcomes is very clear and straight forward (increase in agricultural productivity leads and contributes towards farmers' income increases), it is not the same between the initial outcomes of the components and the purpose of the Project as a whole (intermediate outcome), i.e., agricultural productivity is also related to other factors and not just to the actual improvements in the provision of public agricultural support services. Although it is true that those services conceptually made an important contribution to the productivity gains of the agricultural sector, it is dubious that such a large contribution could attributed only to the ASSP (i.e, 30% productivity gains on priority commodities during the four years of execution of the ASSP).

2.3.2 Execution

As indicated in the previous section, the Logical Framework for the project is very complex. Early in the life of the project, the PIU realized that the time frame, four (4) years for execution of the project seemed unrealistic. This was exacerbated by the effects of unfavorable weather conditions, the expectations that the farmers would have more readily adapted to/accepted the requirements of the project, for example, the cost sharing.

2.3.3 Role of the lending institution in the Project

The Inter-American Development Bank (IDB) was the lending institution. Its original loan was US$22 million but it was later revised to US$17.8 million. The IDB provided monitoring support to the project. The ASSP submitted semi-annual reports and the IDB also conducted monitoring visits. One may say that the IDB provided a check and balance system for the ASSP in terms of procurement system. An annual procurement plan was submitted and non-objection sought for the procurement of equipment, supplies and consultancy services over a certain amount of money.

The main challenge in relation to the lending institution was in relation to the almost annual change of the Bank's supervisory/responsible officer which resulted in delays during the transition periods as each new incumbent went through the `learning curve'.

2.3.4 Role of the Beneficiary Institution

The beneficiary institution, the Government of Jamaica, was to ensure that the necessary mechanisms were in place to implement the ASSP. The Government of Jamaica through the Ministry of Agriculture and Fisheries established the Project Implementation Unit (PIU). The PIU had the responsibility of managing the various activities of the project. The original PIU team comprised the following:

- ✓ Programme Director
- ✓ Financial and Administrative Officer
- ✓ Accountant
- ✓ Technical Officer – Agricultural Support Services
- ✓ Technical Officer – Agricultural Health and Food Safety Services
- ✓ Technical Officer –Productive Projects
- ✓ Assistant Technical Officer – Agricultural Health and Food Safety Services
- ✓ Agribusiness Development Officers (ADOs)
- ✓ Administrative Assistant
- ✓ Driver

The Technical Officers were responsible for implementing the three components of the ASSP. Other staff members were added to the core team.

2.3.5 Conditionality

The special conditions precedent to loan disbursement were met expeditiously and this facilitated prompt implementation of the project. The special conditions were:

- ✓ Establishment of Project Steering Committee (PSC)
- ✓ Establishment of Project Implementation Unit (PIU)
- ✓ Establishment of the Agricultural Support Services and Productive Projects Fund (ASSPPFL)
- ✓ Opening of Executing Agency Account

2.3.6 Sociological intervention

At the outset, the ASSP faced a major challenge in changing the mindset of many of the members of the producer groups, as it related to image, purpose and potential of agricultural pursuits. It was felt that a sustained and deliberate sociological intervention and training regime was necessary to effect the change and communicate plans.

2.3.7 The Importance of Conducting Agriculture as a Business

Through the years, many farmers had become accustomed to receiving inputs from donor-funded Projects, many of which were operated primarily for social benefit and without much reference to profitability and sustainability. The approach used was different in that project proposals were developed for the potential Productive projects and the ones selected for support were those that addressed a clear market opportunity, were feasible from a financial, technical and environmental standpoint and were deemed to be sustainable.

SECTION 3 – CONCLUSION and RECOMMENDATIONS

3.1 Application of Lessons Learned

3.1.1 Development and Implementation of an Exit Plan for the ASSP

For the most part, the ASSP succeeded in achieving its objectives as evidenced by the strengthening of the physical and human resources of many of the Ministry's divisions, the provision of support services to over 50 beneficiaries, the implementation of 26 productive projects, the increases in productivity of some commodities and the increased incomes obtained by some producers. Additionally, the project's role in consolidating the food safety systems in the country is noteworthy.

Although an Exit Plan was not among the original outputs of the project it was thought that one would be necessary in order to ensure consolidation and completion of initiatives undertaken by the ASSP and facilitate a smooth transfer of the lessons learned. Implementation of the plan commenced in earnest in 2007, but some activities were initiated before. The major activities undertaken to address the objective were:

- ✓ Establishment of a `One-Stop-Shop' that facilitates investment in agricultural enterprises. The nucleus of this entity was established within the ASSP and was known as the Investment Centre. The main activity was the preparation of Business Plans which were submitted to organizations that provide funding (loan or grant as appropriate). This function of investment facilitation is being continued under the Agro Investment Corporation.
- ✓ The Agricultural Marketing Project (AMP) – a marketing system that facilitated communication between buyers and the ASSP assisted productive projects.

- ✓ Sustainability strategy for the ASSP-assisted high pay-off productive projects - this was achieved through the provision of management, marketing and other support services.
- ✓ A system for delivery and monitoring of support services for productive projects. A team of Agribusiness Development Officers (ADOs), Sociologists and a Competitiveness Officer continued to provide support, particularly training to the beneficiaries in the productive projects.
- ✓ Strengthening and consolidating agricultural health services – this included implementation of the Import/Export one-stop shop, expansion of warehouse at the Export Complex in Kingston, construction of cold storage facility at the Donald Sangster airport, implementation of a National Animal Identification Programme and continuing the coordinating role in the implementation of the National Food Safety Policy

3.1.2 Sociological Intervention

One approach that was used to address the matter of sustainability was to provide training to assist farmers in addressing sociological issues such as team building, leadership and grievance procedures, as well training in the production practices of the commodities in which they are involved. This type of sociological input was inadequate or lacking in previous agricultural projects and it was out of the `lessons learned' from those projects that it was decided that Sociologists should be a part of the ASSP team. At the height of project activity it was deemed necessary to have as many as three (3) Sociologists supporting the groups, vis-à-vis the one (1) proposed in the Project document

The lesson is that the agriculture sector needs strong producer groups and the development of such groups requires capacity building. Therefore, there is a need to invest in human and physical capital to create enduring outcomes. The Chinese proverb aptly puts it this way:

"If you are planning for one year, grow rice.
If you are planning for 20 years grow trees.
*If you are planning for centuries**, grow men***"

There are two (2) types of change that are usually occur in groups as a result of sociological intervention - mechanical change and behavioural change.

Mechanical change is the more straightforward of the two and is the most identifiable in the short term. It involves changes to improve the operations of the organizations such as procedures and systems that can help to make the organization more efficient. Within the groups that were implementing Productive Projects, mechanical change took the form of the organizations being registered as businesses; groups holding Annual General Meetings to determine their leadership structure; having a cost recovery system in place for the operation and maintenance of their equipment; having a Farm Operations Manager and an Office Assistant; establishing a code of conduct and creating mission statements. These were fairly obvious needs that group members gravitated towards with the full understanding that the adoption of these policies and procedures would enable the organization to be more successful.

Behavioural change on the other hand, tends to focus more on people rather than on systems. This type of change generally requires altering long-held habits and practices and therefore more time is needed to effect this type of change as people are more reluctant to conform. The absence of behavioural change in an organization can undermine acceptable mechanical changes and in the end serve to sabotage the overall goals of

the organization. In order to effect behavioural change, some degree of coddling, cajoling, nudging and even nagging may become necessary.

The sociologists working with the groups within the ASSP, mastered the above mentioned techniques and achieved a measurable amount of success. Today the groups hold regular meetings observing proper protocols, new leaders have grown into new roles, group members have adapted new technologies such as fertigation and drip irrigation practices, post harvest practices have been changed and information technology is part and parcel of their marketing arrangements. Members of the group were introduced to basic computer skills and were encouraged to share information with their stakeholders and other members of similar organizations.

It often takes a long period of time for behavioural changes to become entrenched in an organization such as the farmers' group. These participants need to build up a tremendous amount of trust between themselves and the facilitator of the change. In this case, the sociologist **must** gain the trust of the farmers because the position carries with it a great deal of personal influence and if this is not achieved then it can be difficult to achieve the desired change. The achievement of this level of trust is inextricably linked to the ability of the professional to foster good inter personal relationships using his/her expertise to communicate both group goals and those of the granting agency.

The ASSP sociologists sought to build trust with and among the participants by attending meetings and other group activities consistently. They acted as monitors who endeavoured to keep the participants focused on the group goals and facilitated group cohesion. As a result, the groups have an appreciation for communal activities and co-operation and work together to achieve common goals. The process however, is not complete and as such there is the need for continued monitoring as well

as other sociological and technical interventions and assistance. Some groups did exhibit desirable changes but they will require a further program of work commensurate with their stage of development.

3.1.3 Farm Management

As implementation of the Productive Projects progressed, it became apparent that some producer groups would need some additional support after closure of the ASSP. This has been addressed by providing some projects with Farm Managers who provide more targeted support and monitoring to help ensure sustainability.

3.2 Recommendations for Future Projects

The lessons learned provide the basis for recommendations for future projects. Recommendations include the following:

- Baseline study – this should be conducted at the beginning of the project
- Competitiveness should be investigated to help direct the allocation of scarce resources towards priority industries and products
- Marketing opportunities should be carefully identified before embarking on production plans
- Beneficiaries should be carefully screened to ensure that they have the resources, particularly capital, to make the necessary cost sharing contributions in a timely manner to facilitate smooth implementation of their projects
- Sociological intervention is a critical input in agricultural projects in order to lessen the effect of mind sets that could have a negative impact on project implementation

3.3 Conclusions

The ASSP has had a profound impact on the agricultural sector in Jamaica. This impact is most evident in the pig, sheep, honey and sweet potato industries as well as food safety, animal and plant health.

Additionally, the sociological intervention provided by the sociologists has led to the formation and or strengthening of farm groups that are implementing ASSP Productive Projects.

The dedication and commitment displayed by the project team contributed significantly to the success of the ASSP**.**

Agricultural Support Services Project
September 30, 2009

REPORT ON THE SOCIOLOGICAL INTERVENTION PROVIDED THROUGH THE ASSP

The objective of Component One Output Ten in the Agricultural Support Services Project (ASSP) logical framework proposes to strengthen producer organizations and train producers. To accomplish this objective, sociologists within the Project Implementation Unit engaged farm groups in many different sociological interventions. These interventions sought to strengthen and improve the capacity of farmers at the community level by organizing them into cohesive units for sustained agricultural production and secondly to establish and enhance working relationships among fledgling entrepreneurs and their stakeholders. Targeted training for these participants to strengthen their capacity in order to promote the development of small, self-reliant and sustainable productive organizations was institutionalized. The projected target of 1250 producers was surpassed, largely because the ASSP earnestly and diligently conducted several training/workshops since its inception. These training/workshops ranged in scope and sizes from a few hours; to one day; to week long and residential sessions.

The groups were formally registered as legal entities, the majority of them subscribing to the rules of the Industrial and Provident Society Act while a few, mostly rejuvenated entities, are Co-operatives registered by the Department of Co-operatives and Friendly Societies. The significance of this legal (registered) status is understood and appreciated by some of the members in the group but others had to be educated about their roles and responsibilities which accompany this level of organizational structure.

Formal registration provided these farming organizations with the capacity to apply for and receive grants and loans that have served to benefit the members and their business. As a consequence of this formalization of the groups, members are required to meet regularly, record minutes of meetings, elect a Committee of Management; hold Annual General Meetings, undertake financial

audits and make the necessary statutory deductions. Additionally, they were encouraged to register with the Rural Agricultural Development Authority (RADA) and open current accounts at their local banks. Collectively, some groups have been able to access loans to finance their activities as they embark on being investors in the business of agriculture.

Training and Capacity Building

Since inception, the ASSP engaged the participants in training sessions pertaining to all aspects of project implementation necessary for the full implementation and success of the project. This participatory approach was essential to get buy-in from the farmers and the communities, to ensure that the decisions taken were in keeping with the goals of benefactor and the beneficiaries alike. These sessions imparted valuable information, pertaining to the short and long term goals of the project, as well as aided with building the capacity of the farmers to take on the responsibilities of operating the organizations as an efficient and viable ventures.

Farmers/members were exposed to technical trainings and sociological interventions. In sessions on group dynamics and leadership, team building, goal setting, decision making, risk management, conflict resolution, problem solving and other sociological relations were explored. Selected individuals were trained to become tractor operators, nursery managers and book-keepers. Some also benefited from training in basic computer skills. The resulting increase in the skill set of these members of the group is testament to the participants' commitment, willingness and interest in activities that, in the long run, will benefit the group as a whole.

Today, the average farmer associated with an ASSP-assisted project will boast a wealth of technical information/knowledge garnered through the many workshops and training sessions. The careful selection of knowledgeable trainers and the timely manner in which relevant information was introduced to farmers combined to make the dissemination of information pertinent to productivity and inter-

personal relations as well as to long term goals of the projects. The sociologists aimed to present information in interesting and creative ways so that it would be understood and received as meaningful to the farmers. Most of the technical training sessions exposed farmers to a wide range of subjects including;

- land preparation
- irrigation management
- good agricultural practices
- integrated pest management;
- post harvest practices and
- farm hygiene

The farmers were encouraged to practice good record keeping and that objective inspired the creation of a farm record book which has enjoyed far reaching circulation in the agricultural sector. The importance of good record keeping was further emphasized with the introduction of International Standards workshops for the ISO – 9000. The umbrella marketing organization of the group known as the Agri-Stakeholders Association Limited (ASA), is seeking ISO certification as part of its effort to provide a marketing solution to these producer groups.

Group Development

The groups experienced much growth since their inception. They have been successful in attracting and maintaining their membership and boast a cadre of women among their numbers. Under the guidance of an assigned sociologist, determined their organizational structures and created by-laws to govern their operations. They established systems and procedures for marketing their produce, cost recovery and revenue collection. A few of the associations created mission statements which, at a minimum, articulate the group's vision by expressing what ideally might be achieved from acting in concert with each other. These are key systems to have in place in order to make the organizations sustainable.

Factors that contributed to group development:

- Access to land and irrigation
- Access to important equipment and farm tools
- Provision of other key infrastructure
- Training and workshops
- The availability of a market for the produce -Income earning potential
- Assistance with decision making and project implementation
- Exposure to other stakeholders and a larger sphere of influence
- Commitment and dedication of some members (core group)

Factors inhibiting group development;

- Inconsistency in the marketplace and low returns on investment
- Limited working capital
- The traditional attitude and culture of farmers toward government-assisted projects
- Disharmony amongst members
- Inability of members to provide cost-share/ equity
- Inability of group members to make decisions and mange their own affairs

The composition and development of these project groups is by no means homogenous. This heterogeneity means that most trainings and sociological interventions had to be done based on the needs of the groups. The varying stages of group development and project implementation determined to a great extent, the activities of group. Survey instruments were designed and administered to measure the sustainability of the project groups by examining key areas of the organizations' structure such as the existence of rules/by-laws and executive decision-making ability; financial security and membership. Additionally, technical trainings were organized for the farmers so that they could efficiently manage the acreage they have under production. They experienced

better germination rate which led to greater product yield. Along with the increase in high quality marketable crops, the farm groups were able to negotiate better marketing contracts as they are now able to supply the required quantity and quality. This resulted in an increase in the job creation at the community level, with the need for additional labour during planting and reaping seasons. These farm groups accepted additional responsibilities in their communities and made regular contributions of produce and service to infirmaries and schools in the areas in which they operate.

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