

**Seminar on Developing a Programme for the Implementation of the
SNA 2008 and Supporting Statistics in the CARICOM Region**

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Jamaica

**MAIN POLICY ISSUES RELATED TO THE NATIONAL ACCOUNTS FRAMEWORK
AND SHORT-TERM ECONOMIC STATISTICS; CURRENT COMPILATION
PRACTICES OF VALUE ADDED AND REQUIREMENTS FOR THE SYSTEM OF
NATIONAL ACCOUNTS 2008 (SNA 2008)**

(DOMINICA)

Introduction

The Central Statistics Office (CSO) operates within the Census and Statistics Act No. 17 of 1986 and is the national agency that collects, compiles and publishes social and economic statistics. The compilation of the National Accounts is based on the System of National Accounts 1993 (SNA 93). Presently the national accounts framework does not contain the entire integrated set of macroeconomic accounts, however it follows the concepts, classifications, definitions and accounting rules which are accepted internationally for the compilation of the basic accounts. Within the accounts prepared, is the output account based on the basic measure of the economic activities and expenditure within the economy.

Over the years policies have been developed and improved to ensure general economic growth. Although there may not be any definite policies which relate specifically to the National Accounts Framework, the Government Social and Protection Strategy (GSPS) outlines policies governing different aspects of the various sectors of the Dominican Economy which indirectly impact the National Accounts.

The adoption of the National Strategy for the Development of Statistics (NSDS) will definitely encompass the National Accounts Framework which will facilitate the implementation of the SNA 2008. A draft implementation plan outlining the activities and time frame has been prepared but may need updating (see appendix 1).

THE CHANGING STRUCTURE OF THE ECONOMY

The Government of the Commonwealth of Dominica aims at reducing poverty and increasing social protection as one of its main policies through the creation of sustainable employment and income earning opportunities. This is expected to be accomplished with increased levels of economic growth. According to the Government's Social Protection System Framework continued public actions will provide direct support to its people to help them address risk, vulnerability, exclusion and poverty.

In order to help cushion the effects of the recent global and economic crisis the Government of the Commonwealth of Dominica has introduced additional economic programmes such as providing concessions to the tourism, fishing, agriculture and housing sectors.

Policies aimed at increasing production levels has been implemented within most sectors of the economy. Following the rebased series and revised methodology the leading sectors in economic contribution are the Transport, Wholesale and Retail Trade, Education, Agriculture and Real Estate, Renting and Business Activities.

**TABLE 1: PERCENTAGE CONTRIBUTION OF GROSS VALUE ADDED BY
ECONOMIC ACTIVITY IN CONSTANT PRICES: 2007-2011**

ECONOMIC ACTIVITY	2007	2008	2009	2010	2011^P
Agriculture, Livestock & Forestry	10.84	11.56	11.82	10.83	11.17
Crops	<i>9.24</i>	<i>10.19</i>	<i>10.43</i>	<i>9.45</i>	<i>9.85</i>
Bananas	0.92	1.43	1.26	1.14	1.38
Other Crops	8.32	8.76	9.17	8.31	8.48
Livestock	1.25	1.07	1.07	1.07	1.00
Forestry	0.36	0.31	0.31	0.31	0.31
Fishing	0.57	0.45	0.47	0.38	0.42
Mining & Quarrying	1.64	1.90	1.01	0.96	1.03
Manufacturing	4.68	3.81	3.74	3.66	3.37
Electricity & Water Supply	5.22	4.94	5.32	5.59	5.44
Electricity	4.09	3.85	4.11	4.36	4.34
Water	1.12	1.09	1.21	1.22	1.10
Construction	5.48	6.74	6.30	6.80	6.97
Wholesale & Retail Trade	12.82	13.71	14.48	14.38	13.96
Hotels & Restaurants	2.04	1.92	1.86	1.86	1.93
Accommodation	1.01	0.95	0.81	0.80	0.88
Restaurants	1.03	0.97	1.05	1.06	1.06
Transport, Storage & Communication	16.40	16.41	15.53	15.24	15.33
Road Transport	5.78	5.72	5.85	5.88	5.83
Sea Transport	1.43	1.46	1.16	1.08	1.24
Air Transport	0.19	0.20	0.18	0.17	0.17
Auxiliary Transport Activities & Storage	1.93	1.98	1.59	1.47	1.55
Communications	7.06	7.06	6.75	6.64	6.55
Financial Intermediation	7.99	7.66	7.76	7.95	7.76
Banks	6.36	6.09	6.15	6.31	6.15
Auxiliary Financial Intermediation	0.14	0.12	0.11	0.13	0.12
Insurance	1.49	1.46	1.51	1.51	1.49
Real Estate, Renting & Business Activities	10.92	10.33	10.68	10.63	10.50
Owner Occupied Dwellings	7.63	7.12	7.21	7.19	7.09
Real Estate Activities	2.04	1.91	1.93	1.92	1.90
Renting of Machinery & Equipment	0.32	0.35	0.44	0.39	0.39
Computer & Related Services	0.15	0.14	0.15	0.15	0.15
Business Services	0.78	0.81	0.95	0.98	0.98
Public Administration & Defence; Compulsory Social Security	8.69	7.85	8.36	8.50	8.84
Education	13.54	13.42	13.56	14.17	13.87
Public	4.16	3.89	3.91	4.03	3.68
Private	9.37	9.53	9.64	10.14	10.19
Health & Social Work	3.59	3.41	3.56	3.75	3.75
Public	3.09	2.94	3.07	3.20	3.24
Private	0.50	0.47	0.49	0.54	0.52
Other Community, Social & Personal Services	1.19	1.07	1.08	1.08	1.21
Private Households with Employed Persons Less FISIM	0.33	0.32	0.32	0.33	0.47
	5.94	5.50	5.83	6.09	6.02
TOTAL	100.00	100.00	100.00	100.00	100.00

DOMESTIC AND EXTERNAL ECONOMIC AND FINANCIAL VULNERABILITIES

Some of the obstacles to development in Dominica are:

- Relatively high cost of production
- Decline in labour intensive sectors particularly in the agricultural sector
- High transportation costs

The tourism sector faces challenges such as:

- Tourism infrastructure constraints
- Low levels of incorporation of local communities in tourism and creating opportunities for local entrepreneurs

SHORT TERM ECONOMIC STATISTICS

The CSO has been compiling short-term economic statistics which monitor trends in the economy and provide an “alerting system” for adverse economic conditions. Short term indicators are as follows:

- External trade statistics
- Consumer Price Indices
- Travel statistics
- Manufactured production
- Construction
- Financial indicators
 - I. House sales
 - II. Mortgage
 - III. Delinquent loans
 - IV. Other investments

SECTORAL POLICY ISSUES

According to the Growth and Social Protection Strategy (GSPS), Government’s strategies for pursuing growth are as follows:

- Fiscal policy and administrative reform, including creating an enabling environment for private enterprise and investment attraction
- Sectoral strategies for growth
- Strategies for poverty reduction and social protection

“Government intends to continue to conduct a prudent fiscal policy which is conducive to growth, based on expenditure restraint. Since private investment has a major role in generating growth and reducing poverty, facilitation will continue in this area. The roles of the public and

private sectors are inevitably complementary and Government has been working on enhancing the enabling environment for business and investment attraction.” Strategies for growth were developed within some main sectors such as agriculture, transport, tourism, utilities (electricity and water) and manufacturing.

Since physical infrastructure is critical to attract investment, Government continues to improve the quality of the stock of roads around the country. This will serve the needs of the country and contribute towards economic growth.

Upgrading of the physical infrastructure of the main seaport (Woodbridge Bay) is a priority since this will increase the port’s efficiency thereby allowing it to be a significant contributor to growth in several sectors namely Wholesale and Retail Trade, Transport and Tourism.

Like other countries Dominica has been affected by the rising cost of fossil fuels. This has contributed to a rise in the cost of operations and a “slow down” in some sectors since the cost of manufacturing and services increase while the competitiveness and attractiveness to investment remain a challenge.

The objective is to keep the cost of energy to a minimum. Facilitating the use of alternative energy has therefore become a major goal. Presently the ongoing exploration of the geothermal potential and implementation is expected to create an important additional and sustainable source of alternative less costly energy. In addition these activities will create employment, economic growth and improvement in the quality of life.

Government’s strategy is to work with the water company (DOWASCO) to upgrade the water infrastructure. There are also plans to attract potential investments for exporting bulk water to the rest of the world.

Key result areas for sustainable growth in the agricultural sector have been identified in the GSPS as follows:

- Proactive promotion of sustainable growth and development of the sector
- An enhanced enabling environment for investment in agriculture
- Sustainable use of natural resources
- Improving food security

Agricultural objectives are to achieve sustained growth in production and exports, and to increase employment and earnings from the sector thus enabling agriculture to play a more dynamic role in the economy.

Trade and investment will be facilitated for the agricultural sector by focusing heavily on the marketing of agricultural products by assisting with investment proposals; improving credit facilities for small-scale farmers and the replanting of abandoned farms. Specific emphasis is being placed on a few crops such as coffee and pineapple.

The policy objective for the tourism sector as stated in the GSPS is as follows:

“Dominica will pursue sustainable tourism that enriches the lives of all citizens by creating economic, social and cultural opportunities, protecting the natural resources and scenic, heritage and cultural features of the country, nurturing community involvement in tourism at sustainable levels, and by creating career paths for the young people of Dominica”

Manufacturing and Agro-production share the same policy aimed at encouraging growth while creating an environment which will enhance the performance and competitiveness of manufacturing firms and attract investment.

Government has implemented a low-income housing development programme in order to increase housing facility in the country. So far, the actual expenditure on housing is significant and has created considerable economic benefit to the economy. Generally the construction sector has been an important contributor to economic growth and therefore Government will continue to facilitate the generation of such activity through its fiscal incentives and other programmes.

The cultural industries have been identified as a contributor to economic growth in Dominica. These industries focus mainly on:

- Music
- Film and audiovisual
- Book publishing
- Carnival and festivals

Therefore the legislation of intellectual property rights and the development of strategies will aim at commercializing these industries. The development of local standards and the forging of linkages between trade, culture and tourism are critical areas for those industries.

The National Strategies for the Development of Statistics (NSDS), General Implementation Plan for SNA 2008

Activities towards the implementation of the NSDS for SNA 2008 are presented in the following broad activity plan:

- Strengthening the legal framework to implement the SNA 2008
- Organize the National Accounts Department to implement the requirements for SNA 2008
- Identify the data sources within and without the CSO needed to implement the 2008 SNA and develop a formal cooperation among data suppliers/memorandum of understanding
- Translate data into national accounts concepts
- Elaborate and validate data

Activities Undertaken in Preparation for the Implementation of SNA 2008.

- Establishment of a core set of economic indicators
- Increasing the frequency of economic and household surveys
- Collaborate and coordinate with data suppliers through the conduct of
 - I. User/Producer Seminars
 - II. Field visits
- Establish sample designs for economic sectors to obtain more reliable data
- Coordinate with line ministries and agencies to upgrade systems to facilitate data provision

Statistical and Institutional Actions to Remedy Shortcomings

The CSO goal is to ensure that adequate resources are provided in order to minimize potential shortcomings. Nonetheless the CSO will seek to attend to the issues as they arise in the most efficient and timely manner.

Requirements for the 2008 SNA

In order for the CSO to gain a successful transition from the SNA 1993 to SNA 2008 the following are essential:

- ✓ Ensure that the transfer from the 1993 SNA methodology to the 2008 SNA is well understood.
- ✓ Coordination among the relevant agencies (e.g. Central Bank, CSO, etc).
- ✓ Training of staff for the transition.
- ✓ Need to know the extent of adoption of the SNA 2008. (The minimum set of tables to be compiled.)
- ✓ Need to provide resources for the implementation exercise.
- ✓ Adoption of the SNA 2008 Implementation Plan
- ✓ Compile GDP by Expenditure in constant prices.
- ✓ Revise Supply and Use Table to a more recent reference year.
- ✓ Conduct additional informal sector surveys.
- ✓ Create institutional sector accounts
- ✓ Updating business register
- ✓ Classification of economic activities for all sectors according to the International Standard Industrial Classification (ISIC Rev 4).
- ✓ Last rebased GDP series to be in line with new classifications (ISIC Rev 4) and revised definitions and concepts.
- ✓ Review current survey tools and methodology

Conclusion

The level of sectoral output has generally increased from the last rebased series over the old series which consequently increased the overall GDP. The transition from the SNA 1993 to the SNA 2008 is expected to be implemented particularly if most of the requirements for its adoption are met. It must be noted that based on some of the definitions and concepts in SNA 2008 revisions in methodologies will be required for calculating value added in some dataset.

INVENTORY OF CURRENT COMPILATION PRACTICES OF VALUE ADDED BY ECONOMIC ACTIVITY

This section provides an overview of the sources and methods used to compile the gross value added for each economic activity in current and constant prices.

AGRICULTURE

Agriculture comprises of agricultural crops, bananas, livestock, eggs production and forestry sub-sector industries. The gross value added is estimated using the production approach.

Agricultural Crops

Agricultural crops in Dominica are classified into two categories:

- i. Export crops, such as bananas, vegetables, tree crops and root crop;
- ii. Other subsistence crops

Bananas

Data on bananas are obtained from the Ministry of Agriculture, the Dominica Agricultural Producers and Exporters Ltd (DAPEX, formerly Dominica Banana Producers Limited DBPL) and the National Fair Trade Organization of Dominica (NFTO). The value of output of bananas is derived from the total value of fruit produced for both export and local consumption (including wastage). The value of inputs consists of the total cost of sales of inputs derived by using data from the financial statements of the input warehouse. The double deflation method is used to estimate the constant price estimates for bananas. This method entails revaluing current year's quantity of bananas produced (output) at the 2006 base year price, with inputs revalued at base year prices and then deducted from outputs which are deflated in order to obtain the value added at constant prices. A composite index of the cost of banana inputs is constructed. The value of inputs in current prices is deflated by the said composite index to derive the value of inputs in constant prices. The gross value added in constant prices is equal to the value of output at 2006 prices less the value of inputs at 2006 prices.

Other Crops

Gross value added for other agriculture crops is derived by using the production approach. This method consists of estimating the total value of agricultural output at producer's prices and subtracting intermediate consumption. Output is estimated based on major export crops and covers over seventy-one different crops produced in the country. Intermediate consumption consists of expenditure on fertilizers, insecticides, seeds, the cost of maintaining and repairing machinery and equipment, fuel, and the purchase of small tools, bags, twine and other minor items. It is estimated at 18 per cent of the gross value of output. For constant price estimates, the value of output is revalued at 2006 prices. A volume index was derived and used to extrapolate the base year value added estimate. Production estimates for all crops are obtained from the Ministry of Agriculture.

Livestock

Data on livestock (cows, goats and sheep, poultry, pigs, eggs and meat production etc.) are collected from the Ministry of Agriculture-Livestock Division, livestock farmers, trade statistics and other sources. Estimates for livestock production are obtained from the 1995 agricultural census, National Farm Register, 2008 and livestock extension officers. The cost of inputs were compiled from data on the local sales of livestock and poultry feed along with data on the imports of livestock and poultry feed and chicks which are obtained from the trade statistics. This data is adjusted for deaths, trade and transport margins in order to determine purchaser's prices. The gross value added for livestock is computed as the value of output of production of livestock (goats, sheep, pigs etc.) less the value of inputs (imported livestock feed, locally produced livestock feed, veterinary services etc.) The gross value added for poultry is computed as the gross value of output of eggs and poultry meat less the value of inputs which consists of imported and locally produced poultry feed, repairs and maintenance of animal pens and other costs. The total value added for livestock in current prices is equal to the gross value added for livestock plus the gross value added for egg production. To derive the constant prices, a volume index of output of the number of livestock (cows, goats and sheep, pigs, etc.) is obtained for each year then multiplied by the base year (2006) value added in current prices to obtain value added in constant for each year.

Forestry

The value of output for forestry is estimated based on value of household consumption of charcoal from the Household Income and Expenditure Survey (HIES) and also using similar sources as benchmark, for example Government sales of forest products (wood) and an estimated value for private logging. It is assumed that an average household uses one bag of charcoal per month. Intermediate cost was estimated as five per cent of gross output. Current price estimates for forestry is computed as the value of output of production of forestry products (charcoal) less the value of inputs (wood and logs). The gross value of output of charcoal in constant prices is used to form a volume index to derive the constant price estimates.

FISHING

The fish landed by fishermen is used to estimate for this industry. The quantity and price of fish landings are provided by the Fisheries Department of the Ministry of Agriculture and Fisheries and Dominica Export and Importing Agencies (DEXIA). The gross value added in current prices for fishing is computed as the gross value of output for fish landed less the total inputs which consist of fuel, tackles, oil etc. The double deflation method is used to derive the constant prices. The quantity of fish produced (dolphin, robin, etc.) are revalued at the base year price and a composite index of inputs (gasoline, oil) is computed to deflate total inputs.

MINING AND QUARRYING

The value of output for mining and quarrying comprise the value of the output of stone and sand. The current price estimates are derived from the annual National Accounts Survey of establishments (NAS) as well as annual gross wages from DSS which is adjusted to account for employer's contribution and Trade Statistics. The gross value added in current prices is computed as the value of output less the value of input. A volume index consisting of quantity of stone and sand exported by companies in the industry is formed to deflate the gross output to derive the constant prices.

MANUFACTURING

The manufacturing sector covers the activities related to the production of bakery products, chemicals and related products, beverages, water, wearing apparel, printing and publishing,

furniture etc. The value added is now classified in various sub-groups providing a wider coverage of manufacturing activities in Dominica. The current prices are derived by analyzing the accounting data from the manufacturing establishments provided by the NAS, as well as gross wages and employment data from DSS. Data on production from the larger manufacturing establishments in the various sub-sectors are used to form output indexes while employment data for the other sub-sectors is used to form volume indexes. These indexes are then used to extrapolate the base year value added to compute the constant prices.

ELECTRICITY AND WATER

The electricity sub-sector includes activities related to the production, transmission and distribution of electricity, while the water sub-sector covers activities related to the collection, purification and distribution of water. The main source of information is the annual NAS, the financial statements of Dominica Electricity Services (DOMLEC) and Dominical Water and Sewerage Company (DOWASCO).

Electricity

The current price estimates for electricity supply are based on an analysis of the financial statements of these establishments. The gross value added is computed as the value of output less the intermediate consumption. The constant prices estimates are derived based on a volume index consisting of Kilo Watt Hours (KWH) units produced.

Water

The current price estimates for water supply are based on an analysis of the financial statements of the enterprises. The gross value added is the value of output less the intermediate consumption. The quantity of gallons of water consumed each year from the different categories of consumers is used to form a volume index to extrapolate the base year value added and derive the constant prices.

CONSTRUCTION

This industry covers general construction activities such as constructing, altering and repairing structures as well as sub-contractors engaged in only part of the work on a construction project

such as repairs, painting, and plumbing. Also included are excavating and foundation work and establishments and households undertaking own account construction.

The current price estimation for the construction industry is based on the commodity-flow approach. A range of construction materials are extracted from the external trade statistics. The c.i.f values of net imports used for construction are adjusted for duty, VAT, trade and transport margins. The value of domestic production of construction materials is added to the value of net imports of construction material. Adjustments are made to exclude construction materials utilized for manufacturing purposes. The resulting estimates are intermediate consumption which is then used to derive the gross output and value added for the industry. For the constant prices, an index of the cost of construction is used to deflate the gross value of output. A volume index of the deflated gross output is then used to extrapolate the base year value added. The cost of construction index consists of a weighted index of the cost of thirteen (13) major building materials and the average labor cost for the different types of construction workers (See Table 2, Appendix 4).

WHOLESALE AND RETAIL TRADE

The wholesale and retail trade sector includes all areas of wholesaling and retailing activity in the economy. These include the repair of personal household goods, distribution of fuel and fuel products and wholesale/retail of other goods. The total number of establishments registered in the business register that are engaged in these types of activities, account for a significant percentage of all industrial activities. The current price estimates for this sector are estimated by analyzing the income and expenditure statements received through the annual NAS and the imports data of major wholesalers and retailers. Thus the commodity flow method applied is comprehensive, and to some extent reflects coverage of the informal sector activities. Both the reported data and the imports data provide more accurate ratios thereby facilitating the breakdown of value added among the various sub-sectors. The constant price estimates are derived by deflating the trade margins by the CPI and deriving a volume index of the deflated values to extrapolate the base year value added.

HOTELS AND RESTAURANTS

This industry includes the activities of all registered accommodation establishments such as hotels, guest houses and other paid accommodation and restaurants operating in the country.

Hotels

The gross value added in current prices is derived by analyzing the accounts of the hotels obtained by the annual national accounts survey. Data on number of employees are also sourced from the DSS. Adjustments are then made to account for non responses. Gross value added in current prices is computed as the value of output less the intermediate consumption. A volume index consisting of bed-nights (total number of stay-over visitors multiplied by the average length of stay) is used to derive the constant prices.

Restaurants

Current prices estimates are derived by analyzing the accounts of the restaurants obtained by the annual NAS. Data on gross wages and salaries and number of employees are also sourced from the DSS. Adjustments are made to include employers' contribution and to obtain the total compensation of employees. Gross value added in current prices is computed as the value of output less the intermediate consumption. Constant price estimates are derived by deflating the gross value of output with a price index consisting of the average costs of meals taken away from home obtained from the Consumer Price Index (CPI). A volume index of the deflated value of output is used to extrapolate the base year value added.

TRANSPORT, STORAGE AND COMMUNICATION

This industry covers the activities related to the provision of transport, storage and communication services. The gross value added in this industry is derived by estimating the value added from each of the following sub-groups; road transport, sea transport, air transport, supporting and auxiliary transport activities and communication. Auxiliary transport activities and communication consist of postal and courier services, radio and television and telecommunication services. Various methods are applied for each category of transport as outlined below:

Road transport

This activity includes the transport of passengers and freight via road. Data on the number of hired cars (taxis), buses, trucks/pick-ups and tour buses are available from the Traffic and Licensing Department. The data is adjusted to exclude registered vehicles that may not be in operation and also excludes vehicles owned by Government, industrial or commercial establishments which are not used in the transport industry. Data on income and expenditure are extracted from financial statements or obtained from surveys of this industry. The average estimates for the various groups of vehicles for gross output and intermediate consumption (fuel, servicing and others) are computed. The constant price estimates are computed by extrapolating the base year value added estimates for each type of vehicle based on a volume index of the number of hired cars, buses, trucks/pick-ups and tour buses operating in the current year.

Sea transport

This activity includes the transport of passengers or freight over water, whether scheduled or not. Also included are the operations of cruise or sightseeing boats, ferries, etc. The estimates of gross value added in current prices are computed by utilizing data obtained from the NAS. Data are sourced from the DSS (on gross wages and salaries and number of employees). Adjustments are then made to include employers' contribution to obtain the total compensation of employees. Gross value added in current prices is computed as the value of output less the intermediate cost. For constant price estimation, the total cargo loaded and landed as well as total visitor arrivals and departures by sea are used to form a composite volume index. The gross value added is derived by extrapolating the base year value added by the composite volume index.

Air transport

The estimates of gross value added for this sub sector are calculated on the basis of analysis of data obtained from the annual NAS from local and foreign owned airlines as well as data from the DSS on gross wages and salaries and number of employees. The estimates at constant prices are derived by constructing a composite index of visitor arrivals and departures by air. This index is used to extrapolate base year value added.

Supporting and auxiliary transport activities

This sub group covers the activities of the Dominica Air and Sea Administration (DASPA) travel agencies, tour operators, shipping agencies and cargo handlers. The estimates of gross value added are calculated on the basis of analysis of data obtained from the annual NAS of various establishments. Data on gross wages and salaries and number of employees are sourced from the DSS. Adjustments are then made to include employers' contribution to obtain the total compensation of employees. Gross value added in current prices is computed as the value of output less intermediate cost. The overall value added is the summation of the value added for each sub group. Constant prices are derived for each sub-group by using data on cargo loaded and landed and passenger arrivals and departures by air to form various volume indexes. These indexes were used to extrapolate the base year value added to obtain the constant prices. The overall value added is the summation of the value added for each sub group.

Communications

This activity includes telecommunications, national postal activities, courier services and radio and television services.

Telecommunication

In the case of telecommunications, the gross value added at current prices is estimated on the basis of data obtained from the annual NAS of establishments. For constant price estimates, a composite index comprising of rates per minute for international and domestic calls for fixed line telephones and mobile phones was constructed. Weights are assigned to the different types of communication. Average telecommunications rate is used to form a price index. This index is used to deflate the gross output. The gross value added at constant prices is derived by extrapolating the base year value added with a volume index of the deflated value of output.

Postal Services

The gross value added at current prices is estimated on the basis of data obtained from administrative data. A price index consisting of local and overseas rates for postage of a letter is used to deflate output. Constant prices are derived by extrapolating the base year value added with an index of the deflated output.

Courier Services

The gross value added at current prices is estimated on the basis of data obtained from the annual NAS of establishments in this activity. A volume index consisting of cargo was used to deflate output.

Radio and Television

This sub-sector includes the activities of all radio stations on island and the companies involved in the provision of television services. The current prices are estimated by using the information from their statements and employment data received from DSS. The constant prices are computed by deflating current value added by an employment index.

FINANCIAL INTERMEDIATION

Banks

This sector includes the activities of commercial banks, the Agricultural Industrial Development Bank and credit unions. Data on banking activities are obtained from the annual NAS, and from the mandatory returns of financial institutions to regulatory agencies. Output and costs are estimated directly from these returns and used to calculate the gross value added estimates. The constant price estimates are derived by deflating the average stock of loans and advances by the CPI to derive a volume index of loans and deposits. A margin rate is applied to the deflated value of loans and advances to obtain FISIM on loans and deposits at constant prices. The output of banks at constant prices is obtained from the summation of FISIM and explicit charges in constant prices. A volume index of the output of banks is formed to extrapolate the base year value added to derive the constant prices.

Auxiliary Financial Intermediation

This industry covers the activities of other banks which receive deposits transferable by cheque or otherwise used in payments or available on demand, savings and loan association which are mainly the credit societies league and development corporations. The current price estimates are computed from the analysis of the annual statements. Constant value added is derived by extrapolating the current prices by a volume index of employment.

Insurance and Pension Funding

This industry covers both life and non-life insurance. The gross value added estimates are derived from data provided by the annual NAS and from returns provided to the regulatory authority-Financial Service Unit (FSU) and Eastern Caribbean Central Bank (ECCB). Gross value added in current prices is computed as the value of output less intermediate consumption. Estimates for constant prices for non life insurance are compiled using the average rates for vehicles insurance and property insurance and assigning weights to vehicle and property insurance, to obtain a composite index. The current price estimates of output are deflated by the composite index to derive the output at constant prices, which is then used to extrapolate the base year value added. For life insurance, the constant price estimates are derived by using a volume index of number of life insurance policies issued.

REAL ESTATE, RENTING AND BUSINESS ACTIVITIES

This industry is sub-divided into five sub-groups namely: owner-occupied dwellings; real estate; renting of machinery and equipment; computer and related services; and business services.

Owner-Occupied dwellings and Real Estate (Rented Dwelling)

The current price estimates are developed by benchmarking the population and housing census 2001 data on dwellings and is updated using current data on censuses and surveys. The rental value of tenant - occupied housing and the imputed rental value of owner - occupied housing are both part of housing services, reflecting the tenant's expenditure on service of shelter and the rental cost or value of owner occupied dwellings. Value added for owner-occupied housing is calculated as the imputed output of housing services less the expenses associated with owner - occupied housing, such as maintenance and repairs.

The average rental value is observed and applied to the housing stock. The stock is identified into owners occupied and rented units. The rental value is moved by the CPI for housing, and is applied to the dwelling stock to derive the value of output. A fixed ratio is applied to arrive at the value added in current prices. This procedure result in value added in current prices for both owner occupied dwellings and real estate activities. The constant price estimates are obtained

from a volume index consisting of the number of owner occupied and rented dwellings. This index is used to extrapolate the base year gross value added to obtain the constant prices.

Renting of Machinery and Equipment

The gross value added estimates are derived from data provided by the annual NAS. Data on the number of employees are sourced from the DSS. Current prices are obtained for both vehicle rentals and machinery and equipment rentals. Gross value added in current prices is computed as the value of output less intermediate consumption. Constant price estimates are derived from a volume index consisting of stay-overs for vehicle rentals and by a CPI index for machinery and equipment rentals.

Computer Related Services

The gross value added estimates are derived from data provided by the annual NAS. Data on number of employees are sourced from the DSS. Gross value added in current prices is computed as the value of output less intermediate consumption. A volume index is used to compute the base year value added at constant price.

Business Services

This industry includes the services of lawyers, accountants, management consultants, architects, photographic studios, building cleaning activities etc. The gross value added estimates were derived from data provided by the annual National Accounts survey. Data on the number of employees is sourced from the DSS. Gross value added in current prices is computed as the value of output less intermediate consumption. Constant Price estimates are derived by extrapolation using a volume index of output.

PUBLIC ADMINISTRATION, DEFENSE AND SOCIAL SECURITY

This sector comprises central government and the social security services.

Central Government

The gross value added estimates in current prices are compiled from administrative data using the Income Approach which comprises of compensation of employees. Compensation of employees includes personal emoluments, wages, allowances, overtime, severance payments, honoraria and retiring benefits. Data on the central government consumption of fixed capital

(CFC) is obtained from administrative records. The constant prices are derived by deflating the current prices with a wage index of the average increase in salaries over the years.

Social Security Services

The gross value added is compiled from data provided by the DSS on the annual NAS of establishments. The GVA consists of the total compensation of employees plus depreciation plus taxes on production of the DSS. Constant price estimates are compiled from a volume index consisting of the total number of employees. The GVA in the base year is then extrapolated by this index to obtain the GVA in constant prices.

EDUCATION

This industry is divided into public and private educational activity and includes primary, secondary and tertiary institutions.

Public Education

Data on compensation of employees from the Ministry of Education are analyzed to derive the gross value added which is based on the personal emoluments paid to workers, and consist of wages and salaries, pensions, gratuities, severance pay, back pay and allowances. The constant price estimates are derived by deflating the current prices with a wage index of the average increase in salaries over the years.

Private Education

The current price estimates are derived from data provided by the annual NAS and administrative sources. Data on number of employees are sourced from the DSS. Gross value added in current prices is computed as the value of output less intermediate consumption. A volume index of students enrolled is used to estimate constant value added.

HEALTH AND SOCIAL WORK

Public Health

Data on compensation of employees from administrative records are analyzed to derive the gross value added which is based on the personal emoluments paid to workers, and consist of wages

and salaries, pensions, gratuities, severance pay, back pay and allowances. The constant price estimates are derived by deflating the current prices with a wage index of the average increase in salaries over the years.

Private Health

The gross value added estimates are derived from data provided by the annual NAS. Data on gross number of employees are sourced from the DSS. Gross value added in current prices is computed as the value of output less intermediate consumption. A price index consisting of average medical fees obtained from the CPI is used to deflate output. The base year gross value added is extrapolated by a volume index of the deflated output to derive the constant prices.

OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICES

This industry includes the activities of trade unions, sewerage and refuse disposal, motion picture projection, beauty salons, barber shops, religious organizations, funeral related services etc. The gross value added estimates are derived from data provided by the annual NAS. Data are sourced from the SLC and HIES 2008/9, and DSS (on gross wages and salaries and number of employees). Adjustments are then made to include employers' contribution to obtain the total compensation of employees. Gross value added in current prices is computed as the value of output less intermediate consumption. Constant price estimates are derived for each sub-group by using data on Consumer Price Index (C.P.I) within the industry to form volume indexes. These indexes are used to extrapolate the base year value added. The gross value added for this industry is the summation of the gross value added for each sub group.

PRIVATE HOUSEHOLD WITH EMPLOYED PERSONS

This industry includes the activities of households as employers of domestic personnel such as maids, cooks, waiters, valets, butlers, gardeners, gatekeepers, chauffeurs, caretakers, babysitters, tutors, etc. The product, which is self-consumed, is considered non-market and assessed according to the cost of the personnel in the national accounts. These services cannot be provided by companies. This activity occurs in the household and forms part of the informal sector. The main source of data is Survey of Living Condition, Household Income and Expenditure Survey

2008/2009 and the records of Dominica Social Security. Data are obtained on gross wages and salaries and number of employees. Adjustments are then made to include employers' contribution to obtain the total compensation of employees. The gross value added in current prices consists of compensation of employees. Constant price estimates are compiled from a volume index consisting of the total number of employees within each sub-group. The base year gross value added is extrapolated by this index to obtain the constant price estimates.

FISIM

FISIM stands for financial intermediation services indirectly measured. In the System of National Accounts it is an estimate of the value of the services provided by financial intermediaries, such as banks, for which no explicit charges are made; instead these services are paid for as part of the margin between rates applied to savers and borrowers. The supposition is that savers would receive a higher interest rate and borrowers pay a lower interest rate if all financial services had explicit charges.

The 1993 United Nations SNA calculated FISIM as the difference between property income receivable and interest payable excluding the value of any property income receivable from the investment of own funds. The 1993 SNA recognized that in practice it may be difficult to find a method of allocating FISIM among different users and therefore, accepted that some countries may prefer to continue to use the convention whereby the whole of the services are allocated to intermediate consumption of a national industry.

The 1993 SNA suggests two ways of allocating FISIM to the sectors that consume it. The preferred method is to use a reference rate of interest, which is a theoretical concept. The annual reference rate is the interest rate that people must be paid to persuade them to wait one year before spending their income. The interest rates that are observed on the market are higher than the reference rate because they include a risk factor. The second method of allocating FISIM is using relevant indicators. Relevant indicators are the total bank loans to a given sector and the total deposits held by banks from that sector. Total loans are added to total deposits and each sector's share in total bank loans and bank deposits are used to allocate FISIM. The 1993 SNA recognizes that these two approaches may not be feasible for all countries because of data constraints.

In the case of Dominica, data on global FISIM is obtained from the annual NAS of financial institutions. The balance sheet data on total deposits and loans and advances are obtained from the ECCB and used in the allocation of FISIM. The sector distribution of depositors and borrowers FISIM is allocated among households, non-residents, government and businesses. In the allocation of FISIM, an assumption that banks provide the same amount of service for each dollar loaned and deposited is made. This assumption is made to keep the allocation simple, although it is known that FISIM margins vary among various assets and liabilities. Thus the FISIM allocated to depositors should then be allocated among sectors (household, government, non-residents and businesses) on the basis of their deposit holdings. Similarly, FISIM allocated to borrowers should be distributed among the sectors on the basis of outstanding loans. In the case of Dominica, data are only available on loan holdings and not deposit holdings. In the absence of such data on deposit holdings, industry output is used as an allocator.

FISIM in constant prices is derived by deflating the average stock of loans and deposits by the CPI to derive a volume index of loans and deposits and having the base year margin rate applied to the deflated values of loans and deposits.

Appendix 1: STATUS TEMPLATE FOR THE DRAFT IMPLEMENTATION PLAN - 2008 SNA: QUARTER 1 UPDATE

PHASE	OBJECTIVE	ACTIVITIES	STATUS	REMARKS
MASTER PLAN FOR STATISTICS: To Develop a NSDS System which will facilitate the Implementation of the 2008 SNA			Q1	
		Launch the process		
		Advocacy	√	
		Sensitization	√	
		Consultation		
		Assess current status		
		Identify Users	√	
		Statistical Output	√	
		Assess Methodology		
		Analyse Capacity	√	
		Legal Framework		
		Develop the vision		
		Decide Mission and Vision		
		Agree on desired results		
		Set priorities and strategies		
		Prepare the implementation plan		
		Costing and Time Line		
		Implementation: monitoring and evaluation		
		Implement and Monitor		
		PHASE A: AIMS AND OBJECTIVES	Implementation of 2008 SNA	Define aims and objectives
Assess Capacity- the current status of the NAD				
Review Data Sources				
Review Statistical Output				
Review the needs of national, regional and international users for National accounts				
Determine Objectives relative to the National Accounts Tables to be compiled				
Assess the current technological situation of the NAD	√			

PHASE	OBJECTIVE	ACTIVITIES	STATUS		
PHASE A: AIMS AND OBJECTIVES (CONT'D)	Strengthen the legal framework to implement the SNA 2008	Create, review and/or revise the Statistical Act to ensure the legal powers to CSO	√		
	Institutional Context and NA Department	Decide which organization will implement the 2008 SNA	√		
	Organize the National Accounts Department to implement the requirements of the 2008 SNA	Engage in capacity building			
		train attachments			
		Strengthen the organisation;			
		develop and update SBR	√		
	coordination and cooperation between departments	√			
PHASE C: COMPILATION	Data collection process	Establish formal relationship with data providers			
		inter-agency collaboration	√		
		develop MOU between agencies			
		create network to access inter-agency database			
	Identify the data sources within and without the CSO needed to implement the 2008 SNA and develop a formal cooperation among data suppliers/memorandum of understanding	Meet with the data suppliers to discuss data and what changes or adjustments they may need to make within their data sets	√		
		Establish agreements on data delivery (What will be delivered, detail, frequency and format in detail)	√		
	Translate data into the National Accounts Concepts	Create data storage and automated systems (for compiling national accounts)	√		
		Create bridge tables for Administrative data - which will highlight differences in the Admin data sets and the SNA boundaries, convert	√		
		Search for other relevant quantitative and qualitative data	√		
	PHASE	OBJECTIVE	ACTIVITIES	STATUS	
PHASE C: COMPILATION (CONT'D)	Elaborating and validating data	Edit checks on data delivered (timeliness, detail and completeness)			
		Check the data for coverage, consistency and plausibility.	√		
		Revise preliminary estimates and apply balancing procedures and reconciliation of data			
		Production of Preliminary estimates			
	Data Revision	Routine revision			
	Benchmark revision				
	Methodological revisions				
PHASE D: DISSEMINATION	Dissemination	Users			
		determine users			
		Methods			
		Website/electronic press release/conference			
		satellite releases			
		Calendar			
		Develop an advance release calendar			
		Create the release calendar that specifies;			
The users or target groups					
The content of the publication					
Method of dissemination					