CHAPTER 7
AGRICULTURE

The overall contribution of the broad agriculture sector at constant prices is projected at 20.87 percent of GDP in 2007-08. The contribution of this broad sector was 21.37 percent in 2006-07. Though, the direct contribution of the agriculture sector decreased slightly, it has indirect contribution to the overall growth of GDP. The growth of broad service sector, particularly the growth of wholesale and retail trade, hotel and restaurants, transport and communication sectors is strongly supported by the agriculture sector. Besides, about 48.1 percent of the total labour forces of the country are engaged in agriculture (BBS Labour Force Survey, 2005-06). The country earned US$ 832.27 million in FY 2006-07 by exporting agricultural products which is 6.83 percent of total export earnings. In FY 2007-08, the export earnings from agricultural products stood at US$ 987.56 million, which is 7.00 percent of total export earnings. Besides, the exports of main agricultural commodities such as, raw jute, jute goods, tea, frozen foods, the government has taken initiatives to increase exports of non-traditional agricultural commodities.

Within the broad agriculture sector, the contribution of agriculture & forestry and fisheries are estimated at 16.23 percent and 4.64 percent respectively in FY 2007-08. In FY 2006-07, the contribution of these two sectors was 16.64 percent and 4.73 percent respectively. According to the provisional estimate of GDP for FY 2007-08, the contribution of the three sub-sectors of agriculture and fisheries sector are: crops and vegetables 11.70 percent, livestock 2.79 percent and forestry 1.75 percent.

Management of Agriculture

Bangladesh is predominantly an agricultural country. Agriculture being the engine of growth of the economy, we have no other alternative but to develop agriculture sector for alleviation of poverty. Since provision of food security, improvement of the living standard and generation of employment opportunities of the huge population of the country are directly linked to the development of agriculture, there have been continued effort by the government for the overall development of this sector. To fulfill the food and nutritional demand of the growing population of the country and to ensure and sustain dependable food security, special emphasis has been laid on building up a modern agricultural system based on appropriate technology. Consistent with this, various reform measures have been taken which include ensuring the availability of agricultural inputs including fertliser at the door steps of the farmers, implementation of the agricultural extension policy, simplification of the disbursement procedures of agricultural credit, creating opportunities for investment in agriculture, modernisation of research system for quality improvement of agro-products, the utilisation and extension of the integrated technologies derived from research. In order to alleviate hard-core poverty in *monga* striven areas of the greater Rangpur region, Government has taken a lot of comprehensive measures in this region,

such as the strengthening of research activities to produce HYVs. On the other hand, Bangladesh Rice Research Institute (BRRI) invented a rice called BR-33 which can be harvested by 110-115 days. In the meantime, BR-33 is known as *monga* variety. The work plan for increasing the production at 8.55-25.00 percent of the main crops of the country by 2008-2010 is being implemented.

In the light of National Agriculture Policy, 1999, the government has been steering a range of development projects/programmes in agriculture sector. An Action Plan is in place for proper implementation of National Agriculture Policy. Along with poverty reduction, this Action Plan will assist in building a sustainable food security system by achieving optimum growth in agriculture. Considering the changing situation at national and international levels, the preparation of a new National Agriculture Policy is in the process of finalisation to provide proper guidance for developing agriculture of Bangladesh in future. Measures have been taken to put in place a more robust and effective national agricultural research arrangements and at the same time emphasis has been laid on increased coordination between research and extension. Besides, efforts are underway to bring about overall improvement in agriculture by taking a range of steps like protection of ever-increasing erosion of soil, assessing utility of irrigation water, monitoring abuse of land and preventing crop nutrition deficiencies. An 'Endowment Fund' of Tk.350 crore has been created in the budget of FY2007-08 to support the timely research activities of agriculture related institutions both public and private along with the institutions which are included in NARS.

Food Grains Production

According to BBS final estimate, food grains production for FY 2006-07 was 289.42 lakh metric tons of which Aus accounted for 15.12 lakh metric tons, Aman 108.41 lakh metric tons, Boro 149.65 lakh metric tons and wheat 7.25 lakh metric tons. According to BBS final estimate, the volume of food grains production in FY 2007-08 was 311.21 lakh metric tons of which Aus accounted for 15.07 lakh metric tons, Aman 96.62 lakh metric tons, Boro 177.62 lakh metric tons and wheat 8.44 lakh metric tons. Besides, the production of potatoes increases each year notably. In FY 2000-01, the total production of potatoes amounted at 32.16 lakh metric tons, which increased to 51.67 lakh metric tons in FY2006-07 and this production amounted at 80 lakh metric tons in FY2007-08 by superseding the target of 75 lakh metric tons. The United Nations declared the year 2008 as 'International Potato Year' considering world wide decline of food grains production specially downturn in rice production and the importance of potatoes in food items. Besides, according to final estimate of BBS, Jute production in FY 2007-08 was 46.22 lakh bales, which was 48.84 lakh bales in FY2006-07. Table 7.1 represents the food grains productions status from FY 2001-02 to FY 2007-08:

Table 7.1: Food Grain Production

(In lakh metric ton)

Food Grains	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Aus	18.08	18.51	18.32	15.00	17.45	15.12	15.07
Aman	107.26	111.15	115.21	98.20	108.10	108.41	96.62
Boro	127.66	122.22	128.37	138.37	139.75	149.65	177.62
Total Rice	243.00	251.88	261.90	251.57	265.53	273.18	289.31
Wheat	16.06	15.07	12.53	9.76	7.35	7.25	8.44
Maize	1.52	1.75	2.41	3.56	5.22	8.99	13.46
Total	**260.58**	**268.70**	**276.43**	**264.89**	**277.87**	**289.42**	**311.21**

Source: Bangladesh Bureau of Statistics (BBS),

Crop damage due to Flood

In 2007, the government granted Tk.2.54 crore to help the flood affected small and marginal farmers to recover the losses due to seedless Boro rice, Tk.106.48 crore for 2 times flood and Tk.36.28 crore to regain the severe damages of Sidr and government also granted Tk.22.68 crore for agricultural rehabilitation. The damage of crops due to flood is shown in Table 7.2.

Table 7.2: Crop Damages Due to Flood (2005 -2007)

Food grains	Damaged area (in lakh hectare)		
	2005	2006	2007
Aus	0	-	0.67549
B. Aman	0	0.50	1.83771
T. Aman	1.27262	0.76	8.57255
T. Aman Seedbed	0	-	0.35626
Boro	0	-	0.44996
Boro Seedbed	0	-	0
Total Rice	1.27262	1.26	11.89197
Jute. Vegetables and Others	0.1146	-	2.58394
Grand Total	1.38722	1.26	14.47591

Source: DAE, Ministry of Agriculture.

Food Budget

Domestic Procurement of Food Grains

Budgetary target of domestic food grains procurement for FY 2007-08 was 13.00 lakh metric tons (rice: 12.00 lakh metric tons and wheat: 1.00 lakh metric tons). The actual quantity of rice procured under the domestic procurement programme in this year was 8.68 lakh metric tons as on June 2008. As the market price was higher than the procurement price, it was not possible to procure rice from the last Aman season in one hand, on the other hand wheat procurement was nil. Wheat procurement price was set at 26 Tk/kg and the procurement period was 1st April'08 to

30th June'08. However, Boro procurement was done both in July-September 2007 and again April to June 2008 amounting to 6.02 thousand metric tons and the Boro procurement period is from 16th April'08 to 31st August'08.

Food Grains Import by the Public Sector

The budgetary provision of food grain imports by government's own resources for FY 2007-08 was 8.00 lakh metric tons (rice: 4.5 lakh metric tons and wheat: 3.5 lakh metric tons). Moreover, an agreement was signed in the month of November 2007 after the immediate effect of Cyclone sidr to import an additional amount of 5 lakh metric tons of rice from India in the public sector; however, an amount of 1.57 lakh metric ton was received up to end of June 2008. The total quantity of public import of food grains for FY 2007-08 was 5.54 lakh metric tons (rice: 3.77 lakh metric tons and wheat: 1.77 lakh metric tons) as on 30th June 2008. The total public import of food grains in FY 2006-07 was 2.11 lakh metric tons (rice: 0.25 lakh metric tons and wheat: 1.86 lakh metric tons).

On the other hand, 2.58 lakh metric tons of food aid (rice: 0.82 lakh metric ton and wheat: 1.76 lakh metric ton) was received against the targeted amount of 2.17 lakh metric tons (rice: 0.65 lakh metric ton and wheat: 1.52 lakh metric ton) till 30th June 2008.

Food Grains Import by the Private Sector

Food grains imported by the private sector in FY 2006-07 was 22.09 lakh metric tons (rice: 6.95 lakh metric tons and wheat: 15.14 lakh metric tons). During the period of 1st July'07 to 30th June'08 private import reached at 29.16 lakh metric tons (rice: 16.81 lakh metric tons and wheat: 12.35 lakh metric tons) which is about 7 lakh metric tons more than that of the previous year.

Overall Import of Food Grains

The overall import of food grains for FY 2007-08 was 34.70 lakh metric tons (rice: 20.58 lakh metric tons and wheat: 14.12 lakh metric tons). In FY 2006-07, the overall food grains import reached at 24.20 lakh metric tons (rice: 7.20 lakh metric tons and wheat: 17.00 lakh metric tons).

Public Food Distribution

The target for food grains distribution through public food distribution system for FY 2007-08 was initially set at 2198 thousand metric tons which was finally revised at 1335 thousand metric tons. During July'07 to 30th June'08 period, quantities distributed through OMS, VGD and VGF were 268.00, 267.662 and 187.55 thousand metric tons respectively. Besides, 114 thousand metric tons of rice received from Saudi Arabia was distributed through VGF programme in the Sidr affected areas. A total of 3.47 million families were covered by the VGF programme in which each family received 15 kg rice per month. Under the VGD programme, each of the 0.75 million families received 25/30 kg rice/fortified *atta* per month. Grains distributed under FFW programme up to June'08 included 88.28 thousand metric tons of rice and 50.52 thousand metric tons of wheat. Besides, 103.77 thousand metric tons of rice was distributed through TR and GR and 10.367 thousand metric tons of wheat was distributed as TR.

Seed and Planting Materials

Bangladesh Agriculture Development Corporation (BADC) has been producing variety of seeds through 23 Seed Multiplication Farms and 15 Contract Growers Zones. Besides, BADC has been producing through Contract Growers the potato seed of 1 farm, jute seed of 2 farms, pulses and oil seeds of 3 farms and vegetables seeds by other farms. Achievement of production and distribution of seeds through BADC's own farms and Contract Growers for FY 2006-07 and the production and distribution targets of seeds for FY 2007-08 are shown in Table 7.3.

Table 7.3: Seed Production and Distribution through Seed Multiplication Farms and Contract Growers Zone

(In metric ton)

Seed	2006-07		2007-08 (production)		2007-08 (distribution)	
	Production	Distribution	Target	Achievement	Target	Achievement
Paddy	47358	39118	55600	48179	49820	46123
Wheat	18278	19834	25000	19874	24000	16275
Potato	12450	10616	18000	15032	18000	10013
Jute	1056	1088	1250	750	1250	731
Oil seed	526	442	820	950	750	374
Pulse	509	340	870	795	699	476
Maize	155	224	200	87	226	149
Vegetables	79	43	130	76	79	40
Total	80,411	71,705	101,870	85,743	94,824	74,181

Source: BADC

Currently, production and distribution activities of high yielding varieties of vegetables, fruits, sapling, plant grafting etc. are under way through 13 Agro Service Centre (ACS) and 9 Horticulture Development Centre. Besides, technical assistance has been provided to farmers through proper training on the production of vegetables, fruits, sapling, plant grafting etc. In this area, achievement for FY 2006-07 and production and distribution targets for FY 2007-08 are shown in the table 7.4 below:

Table 7.4: Seeds Production and Distribution Programmes by ASC and Horticulture Development Centre

Item	2006-07 (Achievement)		2007-08 (Production)		2007-08 (Distribution)	
	Production	Distribution	Target	Achievement	Target	Achievement
Vegetables (MT)	260256	260256	248160	249855	248160	246324
Vegetables seed (kg)	1489	1489	5600	8815	5600	8733
Coconut seedling ('000)	286	286	333	330	333	330
Seedling, grafts/ gooties of fruits ('000)	2300	2300	3730	3925	3730	3716
Fruits (MT)	36336	36336	50966	52222	50966	51200
Seedling, grafts/gooties ('000) of flowers	850	850	875	1067	875	1065
Vegetables/spice seedling ('000)	3350	3350	18800	16660	18800	16600
Medicinal plant seedling ('000)	778	778	242	180	242	180
Total	305,645	305,645	328,706	333,054	328,706	328,148

Source: BADC, Ministry of Agriculture.

Fertiliser

In FY 2006-07, the total quantity of fertiliser use was 35.45 lakh metric tons which increased to 38.79 lakh metric tons in FY2007-08. The use of urea fertiliser alone was the highest. In FY 2006-07, the use of urea was 25.15 lakh metric tons which increased to 27.63 lakh metric tons in FY 2007-08. The year-wise use of fertiliser is shown in table 7.5 below:

Table 7.5: Use of Chemical Fertiliser

('000' metric ton)

Type of Fertiliser	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08*
Urea	2239.0	2324.08	2523.39	2451.37	2515.0	2763.00
TSP	405.0	361.0	420.02	436.47	340.0	392.00
DAP	112.0	90.0	140.72	145.00	115.0	129.00
MOP	250.0	240.0	260.38	290.67	122.0	262.00
SSP	130.0	148.0	170.93	130.39	125.0	118.00
NPKS	30.0	45.0	90.0	110.	230.0	120.00
AS	10.0	9.0	5.59	6.32	-	-
Zinc	2.0	7.0	8.0	7.50	26.00	20.00
Gypsum	120.0	140.0	135.7	104.95	72.00	75.00
Total	3298.0	3364.08	3754.03	3682.67	3545.00	3879.00

Source: MMIS, Ministry of Agriculture, *Provisional.

To ensure proper distribution of fertiliser, the Ministry of Agriculture has been regularly supervising and monitoring the fertiliser situation in the country. In order to ensure smooth supply to districts as per estimated monthly demand of urea, restriction has been imposed on the movement of urea from particular district/upazila command areas. But there is no such restriction on the movement of super granules urea. The smooth supply of fertiliser and its distribution have been made possible due to close monitoring of supply, stock, availability, price and evaluation of performance of dealers by the District Fertiliser and Seed Monitoring Committee and introduction of upazila-based dealership network and monitoring of fertiliser centrally by a National Co-ordination Committee. The price situation has been under control and within the reach of the farmers and smuggling and black market trade of fertiliser has also been under control. To avoid any crisis of urea fertiliser during the peak season, the system of maintaining buffer stock of urea by BCIC has been introduced.

Since FY1995-96 urea super/mega granules are being manufactured and marketed through private sector. Super/mega-granules are also being used in other rabi crops. Besides, use of different types of mixed fertiliser is being encouraged for balanced use of fertiliser. To encourage the balanced use of fertiliser, 25 percent subsidy on import are being provided for TSP, DAP and MP since FY2004-05.

Irrigation

Since inception of minor irrigation projects (power pump, DTW, STW and floating pump etc.) implemented by the government in early sixties, area under irrigation i.e. irrigated area has been expanding. Area under irrigation, however, has not been increasing commensurate with expansion of irrigation equipment. Irrigation water is not being utilised economically for augmenting agricultural production because of inefficiency and mismanagement in its use at the field level. Much fuel cost could have been saved and more area could have been brought under irrigation with better irrigation water management. Keeping this in view, farm water management has been given top priority in the National Agricultural Policy. There are continued efforts to intensify crop production and crop diversification and increase crop production by ensuring well-integrated and planned use of both surface and under-ground water. A number of projects have been taken in different places of the country for the development of the irrigation. The notables are: (1). Survey and Monitoring project for Minor Irrigation Development; (2). Prevention of intrusion of saline water and the development of drainage system in Kumira-Sonai Chari region of Sitakunda upazila and the construction of water reservoir in Guptakhali irrigation project; (3). Project for the development of irrigation area (Barendra project); (4). Project for installation of deep tube-wells in Barendra area; and (5). Ashugonj Palash agro-irrigation project etc. The overall objectives of these projects are to develop minor irrigation, proper use of the surface water, extension of irrigation facilities in draught prone areas and poverty reduction through command area development. However, BADC has strengthened the minor irrigation programme to develop irrigation by expanding minor irrigation facilities. The irrigated land area from FY 2001-02 to FY 2007-08 is shown in Table 7.6:

Table 7.6: Area Under Irrigation

(Aea in Hectare)

Types of Irrigation	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
A) Surface Water:							
Major Irrigation	469575	485000	48700	605570	785220	618549	637180
LLP	761439	764300	766153	838377	803170	810027	1045115
Traditional	182240	176280	175200	107000	-	137064	-
Sub-Total (A)	1413254	1425580	1428353	1550947	1588390	1565640	1682295
B) Underground Water							
Deep Tube Well	581599	583692	583692	654189	700662	725258	755210
Light Tube Well (Surface/Deep/Very Deep Set)	2747098	2756558	2776557	3159899	3120607	3196127	3369897
Others	62518	58122	44397	-	-	14403	-
Sub-Total (B)	3391215	3398372	3404646	3814088	3821269	3935788	4125107
Total Irrigation (A and B)	4804469	4823952	4832999	5365035	5409659	5501428	5807402

Source: Department of Agricultural Extension, Ministry of Agriculture.

Agricultural Credit

To uphold the role of agriculture sector and rural areas in the overall socio-economic development of the country, the government has been pursuing the distribution programmes of agriculture and rural credit through State-owned Commercial Banks (SCBs). Alongwith providing credit in agricultural sector, SCBs and agricultural banks are also conducting activities for micro credit for poverty alleviation. The target of credit disbursement through Bangladesh Krishi Bank, Rajshahi Krishi Unnayan Bank, Nationalised Commercial Banks, Bangladesh Rural Development Board and Bangladesh Samobay Bank has been set at Tk.8308.55 crore for FY 2007-08. Out of which, Tk.8580.66 crore has been disbursed which is 103.28 percent of the target. During FY 2006-07, disbursement stood at Tk.5292.51 crore against the target of Tk 6351.30 crore. The overall situation relating to agricultural credit during FY 2000-01 to FY 2007-08 is presented in Table 7.7.

Table 7.7: Agricultural Credit Disbursement, Recovery and Outstanding Balance

(In crore Tk.)

Fiscal Year	Target	Disbursement	Recovery	Balance
2000-01	3265.92	3019.67	2877.87	11137.26
2001-02	3326.64	2954.91	3259.66	11498.13
2002-03	3560.53	3278.37	3516.31	11913.35
2003-04	4378.94	4048.41	3135.32	12705.95
2004-05	5537.91	4956.78	3171.15	14039.84
2005-06	5892.21	5496.21	4164.35	15376.79
2006-07	6351.30	5292.51	4676.00	14582.56
2007-08	8308.55	8580.66	6003.70	17822.50

Source: Bangladesh Bank.

Budget in Agriculture Sector

The Government has taken a number of initiatives for the development of Agriculture sector in the light of Poverty Reduction Strategy Paper (PRSP), National Agriculture Policy and MDGs. To support these initiatives, a total of Tk.6108.88 crore was allocated for the Agriculture Ministry in FY 2007-08. Out of which, Tk.749.61 crore was allocated for 81 projects under development budget and Tk.5359.27 crore under the non-development budget. Against this allocation, a total of Tk.6085.53 crore was utilised, of which Tk.3891.74 crore was utilised as subsidy on fertiliser and Tk.154.04 crore was utilised for flood and Sidr rehabilitation, Tk.350 crore for creating an Endowment Fund for agricultural research and development and Tk.250 crore as diesel subsidy to the small and marginal farmers. Since it is a new area of subsidy and direct cash disbursement to the farmers, the Government has involved Bangladesh Institute of Development Studies (BIDS) for conducting a study to see the effectiveness and impact of the subsidy. In addition to the normal allocation in Agriculture sector, the Government has taken initiatives to provide 30 percent cash incentives for exporting agricultural products. Government is giving 20 percent rebate on electricity bills to the

entrepreneurs of agro-based industries. The Government has also reduced the rate of interest to 2 percent for disbursement of loan for the production of pulse, oil-seed and spices.

Development Activities in Agriculture Sector

(A) Annual Development Programme (ADP)

In the RADP of FY 2007-08, a total of Tk.749.61 crore was allocated for implementation of 81 projects of which Tk.707.75 crore (GoB Tk.602.83, PA Tk.104.92) has been spent up to 30th June'08 which is 94 percent of the total allocation of the Ministry. It may be mentioned here that in the RADP of FY2006-07, a total of Tk.764.13 crore was allocated for implementation of 79 projects (Investment project: 69; Technical Assistance projects: 9 and JDCF project: 1). Of the total project cost, Tk.588.28 crore (GoB Tk.512.29, PA Tk.72.99) was spent till June 2007 which was 77 percent of the total allocation.

(B) Revenue Budget

Thirty development programmes are being implemented with allocation of Tk.203.97 crore under the non-development budget for FY 2007-08 of which Tk 195.85 crore has been spent up to June'08 which was 96 percent of the allocation. It may be mentioned that 28 development programmes were implemented under the non-development budget for FY2006-07 in the Ministry of Agriculture. A total of Tk. 158.72 crore was allocated for the 28 programmes in revised non-development budget, out of which Tk 148.29 crore was spent (93 % of the allocation).

Fisheries

In FY 2006-07, the total production of fish was 23.29 lakh metric tons. Community-based fish culture, use of modern technology along with the different programmes implemented by the Department of Fisheries (DoF) at field levels, have been raising the inland fish production. These programmes include community based fish culture, stocking of fingerlings, restoration of habitats, establishment of sanctuaries, enforcement of different fish conservation laws and flood plain aquaculture etc. In FY 2007-08, the total production of fish is expected to be 24.41 metric tons. The table-7.8 shows the increasing trend of fish production from FY 2000-01 to FY 2007-08.

Table-7.8: Fish Production Statistics from Different Sources

(In lakh metric tons)

Sector	Area (Lakh hactor)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
1. Inland:								
(A) Capture								
River and Estuaries	10.32	1.44	1.38	1.37	1.40	1.38	1.37	1.59
Sunderban	-	0.12	0.14	0.15	0.16	0.16	0.18	0.18
Beel	1.14	0.76	0.75	0.75	0.75	0.78	0.75	1.00
Kaptai lake	0.69	0.07	0.07	0.07	0.07	0.07	0.08	0.08
Flood plain	28.33	4.50	4.75	4.98	6.21	7.18	7.68	7.98
Sub-Total	**40.47**	**6.89**	**7.09**	**7.32**	**8.59**	**9.57**	**10.06**	**10.83**
(B) Culture								
Ponds	2.42	6.85	7.52	7.96	7.57	7.60	8.12	8.65
Baors	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Shrimp farms	1.41	1.00	1.01	1.15	1.21	1.28	1.29	1.48
Sub–Total	**3.88**	**7.87**	**8.57**	**9.15**	**8.82**	**8.92**	**9.46**	**10.17**
Total (Inland)	44.36	14.75	15.66	16.47	17.41	18.49	19.52	21.00
2. Marine Fisheries	0.48							
(A) Industrial	sq.n.m	0.30	0.28	0.32	0.34	0.34	0.35	0.37
(B) Artisanal		3.90	4.04	4.23	4.41	4.46	4.52	4.55
Total (Marine)	**-**	**4.20**	**4.32**	**4.55**	**4.75**	**4.80**	**4.87**	**4.92**
Total	**-**	**18.90**	**19.98**	**21.02**	**22.16**	**23.29**	**24.40**	**25.92**

Source: Department of Fisheries, Ministry of Fisheries and Livestock

Production of Fish Fries and Fingerlings

Availability of high quality fish fingerlings is the basic requirement for increasing fish production. The production and collection of fry/fingerling from natural sources has declined due to environmental changes and manmade obstacles. Due to construction of unplanned flood dams, irresponsible use of insecticides in the crop fields, pollution of water etc. fry production from the natural sources is declining. Several steps were taken by government for the restoration of the natural breeding habitats. Inbreeding is the major problem for fish seed production in the hatchery. To overcome this problem, DoF developed infrastructural facilities in 33 government farms and raised brood stock there by collecting fries from the natural stocks. These brood fishes are distributed to private hatchery owners at a concessional price. The production statistics of fish spawn and fish fries both by public and private sector are shown in the table 7.9 below:

Table-7.9: Production Statistics of Carp Spawn/Fingerling by Public and Private Sector Hatcheries

Year	No.of hatcheries		Spawn (MT.)			No. of fry/fingerlings (crore)		
	Public	Private	Public	Private	Total	Public	Private	Total
2001	112	667	3.66	214.68	218.34	2.75	505.46	508.21
2002	112	671	3.23	271.28	274.51	3.00	517.00	520.00
2003	112	696	3.90	297.78	301.68	3.50	517.00	520.50
2004	112	756	4.80	345.23	350.03	1.84	520.00	521.84
2005	112	731	5.13	315.89	321.02	2.08	461.03	463.11
2006	112	764	4.82	407.83	412.65	1.24	428.28	429.52
2007	115 (77 hatcheries)	860	6.24	457.29	463.53	2.03	622.13	624.16

Source: Department of Fisharies, Ministry of Fisharies and Livestock

Protection and Conservation Programme for Jatka

Government has been executed a comprehensive program for the protection of this natural wealth ensuring the participation of all stakeholders including local public representatives, local administration, Coast guard, Bangladesh Navy, DoF, fishers and mass people residing across the bank of the river system. In FY2007-08, Government has allocated Tk.200 lakh for the implementation of Fish Act to protect Jatka. On the other hand, Tk.600 lakh has been allocated for "Jatka Protection Programme" for three years to provide alternative income generation facilities to the Jatka fishers. At the same time, Government also has allocated 4360 metric tons food grains for the Jatka fishers. As a result, Hilsa production raised from 2.80 lakh metric tons to 2.90 lakh metric tons.

Fingerling Stocking Programme under Revenue Budget

Government has taken initiatives for the stocking of carp fingerlings in the selected Jalmahals, rainfed paddy fields and flood plains since FY 2002-03 to increase fish production from open waters. In FY 2006-07, 90.85 lakh fingerlings were stocked in the open water which brought about 2035 metric tons incremental fish production. On the other hand, in FY2007-08, 141 lakh fingerlings were stocked in the open water bodies. This would result in production of 3005 metric tons of fish this year.

Export of Fish and Fisheries Products

Fisheries sector has been earning a huge foreign exchange. Bangladesh exports frozen shrimp and other fish and fisheries products to USA, UK, Japan, France, Hong Kong, Singapore, Saudi Arab, Sudan and other developed countries. In FY2005-06, 68829 metric tons of fish and fisheries products were exported from Bangladesh which earned Tk.3030 crore. This was increased to 73703 metric tons in FY 2006-07 which earned Tk.3353 crore as export proceeds.

Annual Development Programme (ADP) for Fishery Sector

In FY 2007-08, Tk.63.70 crore has been allocated against 15 ongoing projects under the ADP. Of them, Tk.59.44 crore was spent in FY2007-08 which is 87 percent of the total allocation.

Livestock

In FY 2007-08 the estimated share of the livestock sub-sector in GDP at constant prices is 2.79 percent. In FY 2006-07, the growth of this sub-sector was 5.49 percent, which was projected at 2.41 percent in FY 2007-08. Though the share of the live-stock sub-sector in GDP is small, it has immense contribution towards meeting the daily protein requirements, cultivation, production and export of leather and leather goods.

According to the estimate by the Ministry of Fisheries and Livestock, the number of the livestock and poultry was raised to 4 crore 85 lakh and 25 crore 23 lakh respectively in 2007-08. Table 7.10 shows the growth of the livestock and poultry of the country over the past few years.

Table-7.10: Number of the Livestock and Poultry in Bangladesh

Livestock/ Poultry	**Number** (in million)						
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (Estimated)
Cattle	22.46	22.58	22.60	22.67	22.80	22.87	22.90
Buffalo	0.97	1.01	1.06	1.11	1.16	1.21	1.26
Goat	16.96	17.69	18.41	19.16	19.94	20.75	21.56
Sheep	2.20	2.29	2.38	2.47	2.57	2.68	2.78
Total (Livestock)	**41.59**	**42.52**	**43.45**	**44.41**	**46.47**	**47.51**	**48.5**
Chicken	152.24	162.44	172.63	183.45	194.82	206.89	212.47
Duck	34.67	35.54	36.40	37.28	38.17	39.08	39.84
Total (Poultry)	**186.91**	**197.98**	**209.03**	**220.73**	**232.99**	**245.97**	**252.31**

Source: Department of Livestock, Ministry of Fisheries and Livestock

The production of milk, meat (beef, mutton and chicken) and eggs have been on the increase over the past several years. Table 7.11 summarises the production statistics of milk, meat and eggs since 2001-02:

Table-7.11: Production of Milk, Meat and Eggs

Product	Unit	**Production**						
		2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Milk	Million ton	1.78	1.82	1.99	2.14	2.27	2.28	2.65
Meat	Million ton	0.78	0.83	0.91	1.06	1.13	1.04	1.04
Eggs	Million	4424	4777	4780	5623	5422	5369	5654

Source: Department of Livestock, Ministry of Fisheries and Livestock.

Artificial Insemination of Cattle

Artificial Insemination is an important and successful programme for livestock development. Semen is collected from the bulls reared in the Central Cattle Breeding Station at Savar and other 22 District Artificial Centres, and processed as diluted and frozen semen to run the Artificial Insemination Extension Programme. A total number of 2069 sub-centres and points are in operation to run the Artificial Insemination Extension Programme by using both diluted and frozen semen.

Vaccination of Livestock and Poultry to Control Disease

The Government has been producing twelve different types of livestock and poultry vaccines to immune livestock and poultry population to prevent some diseases. During the period FY 2001-02 to FY2005-06, a total of 112.38 crore doses of vaccine was produced and distributed. The number of vaccine doses produced was 24.63 crore in the FY 2007-08.

Livestock Act

Considering the importance of livestock sub-sector, the government has approved "National Livestock Development Policy-2007". In order to control and protect livestock from diseases and to ensure public health safety, the Animal Quarantine Act, 2005 and Animal Disease Prevention and Control Act, 2005 have been enacted.

Development of Infrastructure

Sixty-four District Veterinary Hospitals have been established in district headquarters for the expansion of modern veterinary services to the farmers. In addition to veterinary services, technical supports on nutrition are provided to poultry and dairy farms through to carry out analysis of animal and poultry feeds. Moreover, 464 Thana Veterinary Dispensaries located at upazilas have been converted into Upazila Livestock Development Complex (ULDC). Currently, 386 ULDCs are functioning to provide services line imparting training to small-scale dairy farms and poultry farmers and providing necessary advice to farmers. The construction of the rest 78 ULDCs is underway.

Highly Pathogenic Avian Influenza (HPAI)

HPAI is a highly contagious and fatal disease of poultry with serious human health hazard implications. Appearance of the disease in Bangladesh was first declared in 22nd March 2007 and since then 287 outbreaks so far have been detected in 128 Upazilas and 14 metro Thanas of 47 districts of the country. The disease has been detected in both commercial farms and backyard poultry but majority of outbreaks was reported in commercial sector. Government is trying to contain the disease with stamping out programme around the infected premises. As a part of stamping out efforts 16, 37,266 poultry were killed and 21, 84, 539 eggs were destroyed.

The country has experienced two waves of HPAI outbreaks since March 2007. The number of outbreaks regressed steadily over the time. The disease reappeared again in September 2007 and number of outbreak started to climb steadily. During February 2008 the number of outbreaks reached its peak to 93 and a declining trend is seen from March 2008 with 70 outbreaks. The last outbreak was identified on 18 May in Tangail.

Government initiatives to control HPAI include upgrading of laboratory capacity, surveillance, improving the field capacity for disease investigation and response. Two projects namely "Avian Influenza Preparedness and Response Project" supported by the World Bank and "Strengthening of Support Services for Combating Avian Influenza (HPAI) in Bangladesh" funded by USAID are being implemented to prevent and control Avian Influenza (HPAI). Door-to-door active surveillance is being conducted in 150 Upazilas for early detection and containment of the diseases. The laboratory capacities for primary diagnosis of avian influenza will be expanded to all 64 districts, which is currently limited in 6 Field Disease Investigation Laboratories. As part of training plan to train Sixty-four lead farmers in each Upazila about 2400 farmers from 40 upazilas have so far been trained. Training is also imparted on surveillance,

disease investigation, diagnosis, disinfection, and communication to civil servants, veterinarians, laboratory technicians and farmers. Farmers who have lost their birds due to stamping out effort have so far received Tk.12.09 crore as compensation.

Annual Development Programme

In Annual Development Programme of FY 2007-08, an amount of Tk. 76.85 crore was allocated for 18 development projects under livestock sub-sector. The total expenditure up to June 2008 stood at Tk 66.69 core which is 89 percent of the total allocation.