Poultry Industry in Bangladesh: Issues and Challenges

S. M. Rahman\textsuperscript{a}, B. K. Roy\textsuperscript{b,c}, S. I. M. Shahriar\textsuperscript{c} and F. Y. Nipa\textsuperscript{d}

\textsuperscript{a}Dept. of Business Administration, North Western University, Khulna-9100
\textsuperscript{b}Dept. of Politics and Public Administration, Islamic University, Kushtia-7003
\textsuperscript{c}Fisheries and Marine Resource Technology Discipline, Khulna University, Khulna-9208
\textsuperscript{d}Dept. of Petroleum and Mining Engineering, Jessore University of Science and Technology, Jessore-7408, Bangladesh

ABSTRACT

With the development of poultry industry in nineteenth decade, this industry had to face many ups and down conditions. Day by day approximate 3-4 percent of its contribution on Gross Domestic Product (GDP). A large number of people were engaged in poultry sectors as a freedom business. This study was conducted to find out the present situation and future challenges of poultry industry. In this study, data were collected from 20 reputed poultry farms located in Rajshahi district, Bangladesh using a pretested interview questionnaire. The collected data was analyzed by using statistical package on social science. The results showed statistical table with explanation so that the reader could easily realize the outcome for the study. Some challenges such as lack of inclusive poultry policy principle, technical know-how, shortage of capital, maintenance of bio security, operation management, lack of trained manpower, lack of proper management information system, lack of adequate laboratory testing facility, improper handling of medicine and vaccine, disaster management, the dependence on the channel members, neighboring country threat, seasonal fluctuation, backdated marketing strategy etc. were found from this study. Based on findings, recommendations were made on some major issues like poultry guiding principle, technological efficiency, proper registration system, bio-security, management information system, laboratory testing facility, mechanical and managerial training, symbiotic and incorporated union, protection of consumer rights, financing for small farmers, professional distribution system etc.

Key words: Farm business, poultry industries, operation management, policies, issues and challenges

I. Introduction

The poultry industry present in Bangladesh is a vital sector to improve agricultural growth and the diet of people. This sector is important particularly as it serves as one of the major sources of daily
protein and nutritional supply (Raihan & Mahmud, 2008). It is expected that the future demand of poultry products will be enhanced due to high population and income growth, urbanization and increasing high income elasticity of demand. This sector is also significant in generating economic activities involving the women and especially the people from the poorer sections of any society. Poultry represents an asset, which can be liquidated when the need arises. Investing in small-scale poultry is an effective strategy to uphold a pro-poor and comprehensive growth. Invest of US $350 in a poultry litter based biogas plant can earn an income of $15 per month (Saleque, 2013).

In recent years, a noteworthy revolutionary growth was observed in poultry business. According to Halcyan (2011) and Islam et al. (2014), there about 43,589 poultry firms were reported in the year 1993-94; it was predicted that this number would have reached about 1,50,000 by the year 2006-07 and approximately above 2,30,000 by 2014. Despite of the rapid growth, poultry industries are facing many constraints likely lacking of efficient marketing system, lack of technical know-how, lack of adequate laboratory testing facility, inadequate quality and disease control practices, inadequate access to credit facilities, intense foreign competition and high tax on poultry seed import. Raihan & Mahmud (2008) found that access to working capital by smaller stakeholders is also considered as a major hurdle towards the flourish of poultry industries in Bangladesh.

Like some other industries, poultry sector is on a challenge now. Price hiking of raw materials, different diseases, government policy, farmer’s unawareness, lack of scientific method, neighboring country’s aggression continuously makes the industry vulnerable. If it is possible to find out the underlying challenges that is faced by poultry industry now and that make the industry most vulnerable, some major steps can be taken to overcome and win the challenges. In this regard, this study was undertaken with following objectives:

- to identify the challenges of poultry industry of Bangladesh.
- to determine the contribution of poultry industry in economy.
- to find out the way of solution for prevailing problem.

II. Materials and Methods

Literature review: A number of scholars had studied regarding the poultry industries pros and cons in Bangladesh. Alam (1997) reported that with the intervention of Smallholder Livestock Development Project (SLDP) in the study areas, there was a shift of some of the beneficiaries from wage employment to self-employment.

Shamsuddoha (2010) observed that little attention was paid to the sustainable development of eco-friendly poultry farming in Bangladesh on commercial basis. Banerjee (2004) reported the comparison of poultry business with other livestock. He also reported that poultry requires a low investment to commence the farming than others in small scale. Poultry farming suggested the full-time or part-time employment opportunities for people from any age group. Raihan and Mahmud (2008) examined that how poultry trading can reduce the poverty and make linkage between trade and poverty. Das et al. (2008) conducted a research where he showed the small scale comparison on his poultry production profile and expected future projection in Bangladesh.

Islam (2005) conducted a research where he showed the demands of poultry products and gap prevailing in this sector. He proposed the way to minimize the gap which will provide mutual benefit for all shareholders as well. Begum (2005) found the cause of contract poultry farming and gap between government support and poultry development in her alternative institutional arrangements for contract farming in poultry production in Bangladesh and their impacts on equity.

Chakma (2008) mentioned that Bangladesh experienced Highly Pathogenic Avian Influenza (HPAI) outbreaks during 2007 and 2008. The Bangladeshi poultry sector has been tremendously affected by the disease. Rahman (2008) also mentioned the economic losses of the farmers for different diseases of poultry farm in his issues and interventions in the poultry sector.
**Methodology:** This is a descriptive study which was conducted during September to November 2012. Both the primary and secondary data were considered to conduct this study. A total of 20 poultry farms (Fida and Fima poultry firm, Ujjal poultry, Nahid poultry, Basir poultry, Newton poultry, Oasim poultry, Moshiur poultry, Manik poultry, Sujan poultry, Momin poultry etc.) out of 60 farms were surveyed with a structured questionnaire in Rajshahi district. The survey questionnaire was a combination of some multiple and research questions. The collected data were coded using Likert scaling technique. The scale was ranging from 1 (minimum) to 5 (maximum) categories. The respondents responded to questions under each variable on five point scales with 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree and 5 = strongly disagree to measure the perception of farmers about the poultry farm issues and challenges. The secondary data were collected from newspapers, books, journals, articles, websites etc. Data processing was done through using the following steps: editing, coding, classification and tabulation (Kothari, 2004; Malhotra, 2013; Zikmund et al., 2014). The collected data were analyzed by using Statistical Package on Social Science (SPSS).

**III. Results and Discussion**

From the structured survey questionnaire, the responses that were found are shown in Table 01.

**Table 01. Frequency distribution for the present issues and challenges of poultry industry in Bangladesh**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Options</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Do you think the production is hampered due to shortage of capital in proper time?</td>
<td>Strongly agree</td>
<td>02</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>12</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>04</td>
<td>20</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>02</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>II. Do you think the role of local livestock agency (Govt.) is satisfactory?</td>
<td>Strongly agree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>06</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>14</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>III. Do you agree that the optimum level of production is hampered due to lack of forecasting policy regarding the virus and other diseases?</td>
<td>Strongly agree</td>
<td>04</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>14</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>02</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>IV. Do you agree that government should share risk with poultry production and provide other support such as training and development for the farmer?</td>
<td>Strongly agree</td>
<td>12</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>08</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>V. Do you agree that quality of chicken provided by the hatchery is good and satisfactory?</td>
<td>Strongly agree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>04</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>14</td>
<td>70</td>
<td>90</td>
</tr>
</tbody>
</table>

Corresponding author email: bkroy.ku@gmail.com (B. K. Roy)
eISSN: 2412-8279, ©Rahman et al. (2015), Research paper
It was found that most of the farmers agreed with capital shortage. The optimum capital was not supplied during the time of production. Here, farmers showed the most dissatisfaction towards livestock agency. Because they thought that the agency does not pay any attention to the poultry farmers. Respondents were agreed with symptoms of virus and other diseases created impediment to desired level of production. Most of the farmers were strongly agreed with the government risk sharing issues. Farmers were dissatisfied with quality of chicken provided by the hatchery. The growth rate of the kids was very slow due to lack of quality of high quality seed. Relationship of farmers with the producers and suppliers were not satisfied in a mood, although it varied from person to person. Respondents were agreed with the necessity of feed and fertilizer for much poultry production. For being unawareness, high mortality rates and diseases were happened. Normally, farms were registered. But some farms were not registered also. Approximate 40 percent farms were not registered. Most of the farmers were not introduced with proper marketing system. That’s why they could not address the customer needs, wants and demands properly. Most of the farmers were self-financed, a very few of them got access to the bank loan facility. Electricity was a common disturbance for poultry production. The rate of production and income was not satisfactory at all due to the above mentioned impediments.

- Based on the results the following findings were noted below.
• Lack of proper poultry policy principle was considered as a basic restraint to ensure proper implementation of rules and regulations pertaining to run of the industry. The value chain system was not properly working due to the lack of proper implementation of regulations and policies.
• The relationships among the poultry farmers associations were not cooperative. So the middlemen somehow got the chance to abuse the ill motive.
• Lack of technical efficiency created a burden to handle the poultry industry properly. Chicken rearing, disease handling, production rate were greatly influenced by inadequate knowledge of technology.
• For the proper growth of chicken bio-security management was a vital issue. But proper attention was not given in this issue.
• Low level performance, decreasing production rate, unethical activities, unable to use optimum capacity, lower level revenue were the ultimate result of weak operation management system. That's why the areas of marketing operations, financial system and quality control management system were found inappropriate.
• Proper training (technical, medical and managerial) management system was absent in poultry industry which was ultimately hampering the production.
• Inappropriate Management Information System (MIS) hampered the proper collection, processing and dissemination of information to the poultry industry. Though the stakeholders involved in this business pay considerable attention to the price rate, current demand, and vaccination system, but the disruption of proper information flow hindered the actual growth of this poultry sector.
• Sufficient facility for laboratory testing was not found at most of the poultry industries, as a result the causes of diseases sometimes remain unknown. The improper utilization of medicine and vaccine caused low production rate and high rate of mortality that had a direct impact on poultry farms.
• Capital unavailability was a major threat for the farmers. Loan system, installment procedure, return flow, high interest rate resulted low attachment to the poultry farms.
• Government sometimes open border for importing kids and eggs without considering the native farmers interest. Local farmers felt insecure as there was no policy in this regard as neighboring country threat.
• During the seasonal fluctuation, the growth of poultry was seriously affected. The egg production tremendously decreased. During Eid-ul-azha the demand of poultry meat got down for other substitute.
• Most of the farmers of our poultry farms were illiterate. They were unconscious and unwilling to introduce new technology. Lack of education they were unable to forecast demand that caused great loss to the farm.
• Marketing is an art for any farm to gain profit. Very few farmers were acquiring the proper knowledge of marketing. Lack of proper estimation of needs, wants and demands perfectly customers were not identified. As a result market was out of control. Distribution system was not found at the proper way. Inconsistence interdependency of the channel members caused problem in the flow of chickens, eggs, medicines etc.
• Disaster management awareness was not well-found. The farmers were not well aware of those calamities.
• Consumer Association of Bangladesh’s (CAB) role in the monitoring and evaluating activities was not satisfactory at all. Consumer's trust is not possible without the active involvement of CAB.

➢ Problems identified are mainly focused on solution strategies. The strategies represented below that are taken on the basis of primary and secondary data.

• This national poultry policy will be improved as early as possible and proper implementation need to be ensured. The national policy must include biosafety measure in between the value chain, ensuring the standards of vaccine and drugs and effective code of conduct for all stakeholders and traders.
• As the guardian of the poultry industry, local livestock agency (Govt.) contribution must be
extended. They should formulate policy, implement, and control the policy in such a way so that the businessmen can be benefited.

- The registration system of the farms should be mandatory. It will enable the authority to identify all the farms and help them to take any necessary steps if required.
- The relationship between the channel members (suppliers-producers-agents-distributors-dealers-retailers) must be complementary. A smooth relation among them can improve the value system, thus increase the overall production.
- The loaning system for the poultry farmers especially for the small poultry businessmen should be trouble-free. If they are provided the loan with limited condition and minimum interest rate, the farmers will be able to take more loans and thus production will be increased. Sometimes, Government should come forward to minimizing the risks of the farmers.
- Training program based on both practical and technological knowledge is needed to disseminate modern knowledge among the farmers. Training program regarding the vaccination system, virus preventive measures, and varieties purposes can be arranged.
- The chicks provided by the hatchery must be superior in nature. Because disease free chicks ensure the proper growth at production level.
- Marketing strategy should be implemented properly. If we can properly produce our product, can set exact pricing method, maintain distribution system and promote properly then success will automatically come.
- Consumer Association of Bangladesh (CAB) can play pivotal role regarding monitoring and evaluation of the rights of consumers. Awareness program can be organized to make people introduce with food safety measures as well.

IV. Conclusion

Poultry industry contributes a major portion of our national economy. From the very beginning of this sector, it serves not only the economic purpose but also the fulfillment of the food requirements of this country. Initially, it was not much evolved so large like now but today, it has become a huge sector where millions of peoples are involved. Though, the improvement of this sector is remarkable but the present situation demands more development. Poultry farms have been increasing noticeably; but the bird flu, rising price of raw materials, market aggression from neighboring countries and lack of support from the government are hindering the growth of this sector. This study revealed some necessary information about the issues and future challenges of poultry industries and set up some effective recommendations to overcome impediments and to uplift the present situation of this sector efficiently. Moreover, this study will help poultry farmers to improve their socio-economic status as well.

Acknowledgement

The authors express profound gratitude to Md. Borak Ali (Professor, Department of Marketing, Faculty of Business Studies, Rajshahi University), who always supervised to prepare this study. In addition, assistance and support from Rudrendu Ray (Assistant Professor, Department of Marketing, Faculty of Business Studies, Rajshahi University) is highly appreciated by the authors. This study was conducted through self-funding of the authors.

V. References


APPENDIX

Study questionnaire below.

1 = Strongly agree
2 = Agree
3 = Neutral
4 = Disagree
5 = Strongly disagree

Poultry Industry in Bangladesh: Issues and Challenges.
(Interview schedule)

Name of the farmer: ........................................ Date of interview: ........................................
Address of the farm: ........................................ ........................................

1. In which year did you start farming?
2. How much amount of kids do you produce annually?
3. What are the strategies you follow for market forecasting?
4. How many middlemen are involved in the distribution level?
5. Do you agree that there is no complexity in getting loan from bank?
6. What is the marketing system of poultry firm across the country?
7. What is the most important problem you face in time of production?
8. In which time you face most vulnerable for demand-supply interaction?
9. Can you address some more problem which causes low production rate?
10. Please say your opinion to increase poultry production in your farm?
11. Do you think the production is hampered due to shortage of capital in proper time?
12. Do you think the role of local livestock agency (Govt.) is satisfactory?
13. Do you agree that the optimum level of production is hampered due to lack of forecasting policy regarding the virus and other diseases?
14. Do you agree that government should share risk with poultry production and provide other support such as training and development for the farmer?
15. Do you agree that quality of chicken provided by the hatchery is good and satisfactory?
16. Do you agree that the relationship between supplier and farmers are friendly?
17. Do you think it is important to provide necessary feed and fertilizer for much poultry production?

Corresponding author email: bkroy.ku@gmail.com (B. K. Roy)
eISSN: 2412-8279, ©Rahman et al. (2015), Research paper
18. Do you think that high mortality rates and diseases are broken out due to the low level awareness of the farmers?

19. Do you follow the proper marketing system?  
Yes/No

20. Is electricity hamper more on poultry production?  
Yes/No

21. Do you register your farm?  
Yes/No

22. What are the sources of your capital?  
Bank loan/Own/Others

CITATIONS

APA (American Psychological Association)

MLA (Modern Language Association)

Chicago/Turabian