

Issues and Interventions in Poultry Sector **Final Report**

USAID - ATDP II Undertaking



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Management Summary

This study was initiated by USAID along with ATDP to develop an intervention strategy for the poultry sector of Bangladesh with an intention to address the problems faced by the actors involved in the sector.

The study was conducted in three broad phases: the first involved secondary research and depth interviews to help identify specific problems prevailing in the sector, the second phase involved validating the findings of the first phase, while the third phase identified possible intervention strategies to resolve the problems at hand.

The study included the entire value chain starting from the grand parents to the processing units. In addition problems associated with some important embedded services as well as stand alone business development services were also looked at.

The study outlined major concerns focusing on the entire value chain. The following 16 aspects have been finally considered as comprehensive issues for intervention.

1. Lack of comprehensive poultry policy.
2. Weak association.
3. Weak technical know-how.
4. Inefficient bio-security.
5. Weak management skills.
6. Lack of trained manpower.
7. Lack of MIS.
8. Lack of adequate laboratory testing facility.
9. Improper handling of drugs and vaccines.
10. Inadequate quality standards.
11. Inadequate disaster preparedness.
12. Weak media management.
13. Weak consumer association.

14. Dominance of channel members.
15. Access to finance.
16. Weak distribution system.

Based on the problems identified above, a total of 10 intervention strategies have been identified. The intervention strategies have been designed to help minimize duplication in intervention design and thus aid in clearly delineating the scope of the intervention strategy. The following have been identified as the broad areas for intervention.

1. Poultry Policy Guideline.
2. Symbiotic and Integrated Association.
3. Technological Efficiency.
4. Bio-Security.
5. Technical and Managerial Training.
6. Management Information System.
7. Laboratory Testing Facility.
8. Protection of Consumer Rights.
9. Financing for Small Farmers.
10. Efficient Distribution System.

The study concludes that a donor driven intervention strategy with partnership across the economy is the only way to success. However, the approach has to be on a cost sharing and private sector driven approach to make it sustainable. In addition, the strategies have been designed to meet global standards as the ultimate means to satisfying consumers and hence ensuring long term sustainability.

Introduction

The Poultry industry is one of the largest contributors to GDP and employment of Bangladesh. Over the eighties and early nineties this industry flourished tremendously and saw a phenomenal growth. Towards the last decade however, the industry went through high variations in prices and very low margins most often leading to losses especially for commercial broiler and layer farmers. In addition, the industry is facing problems associated with technology changes and proper health care measures, etc. Based on the above it was considered appropriate that a direction for future intervention be outlined to ensure steady growth of the industry. With this in view United States Agency for International Development (USAID) took the initiative along with Agrobased Industries and Technology Development Project Phase II (ATDP) to develop an intervention strategy for the sector.

The major objective of the study has been to determine a broad guideline of intervention strategies for the poultry sector across the value chain with an intention to address the problems faced by the actors involved in this sector.

The methodology of the study included various phases. During the first phase a **primary research (depth interview) along with an extensive secondary research** was conducted by ATDP on the poultry industry and the issues for each component of the value chain and service providers were identified. The issues identified during the research was then put forward for **validation** in front of a group of donors, donor agencies, industry stakeholders, and the government for validation and prioritization of the most pressing issues for each component of the value chain along with the Business Development Services (BDS) of the sector. Once the issues were validated, and ranked according to its relative significance, the study moved to the final phase to **outline broad intervention strategies** which addressed each of the prioritized issues. The interventions for each of the issues clearly delineate the mechanism for intervention, the broad time frame it will require to implement the intervention, and most importantly the partner (donor, donor agency, government or industry) which will implement the intervention.

The bibliography of the secondary study is provided in annex one, the data instrument of the primary survey in annex two, the validation workshop plan is provided in annex three, the results of the validation workshop are included in annex four, while the results of the intervention workshop are provided in annex five.

Major Problem Areas

The major problems requiring intervention validated in the program are as follows:

1. Lack of comprehensive poultry policy guideline was considered as a basic constraint to ensure proper implementation of rules and regulations pertaining to sustenance of the industry. This was true for the entire value chain where concerns related to bio-security, health management, pricing policies, quality assurance, etc. were identified as issues requiring immediate attention.
2. The associations of the poultry farmers across the chain were considered weak as well as across the value chain they were found to be competitive rather than complementary. Thus a symbiotic relationship is non-existent resulting in exploitation by certain groups.
3. Lack of Technical know-how, both technologies as well as trained people to handle the technology were found to be inadequate at all levels of the value chain. The technology related issues included knowledge regarding rearing, disease handling, productivity, etc.
4. Maintenance of bio security was considered extremely important for ensuring quality consumption by human beings. It was outlined that bio security was a problem across the value chain, though, the characteristics of bio security varied. For example in case of grand parent farm or parent farm, bio security was more a concern due to location of the farms while for the layer and broiler farms it was more of internal environment management. Again, in case of small processors, this was more a storage, processing and packaging worry.
5. Management of operations was another major weakness prevalent across the value chain resulting in poor performance, low productivity, inadequate capacity utilization, low profitability, business ethics, etc. The lack in management was mainly in the areas of general management of the firm, marketing operations, financial management, and quality control management.
6. Lack of trained manpower (technical, medical, management) to facilitate training programs at all levels was found to be another major cause hampering growth.

The training inadequacy was a result of lack of adequate materials, low incentive for trainers, and inadequate facility for providing practical training.

7. Lack of proper management information system to ensure efficient collection, processing, and dissemination of information surfaced as another major impediment towards success of the poultry sector. Lack of adequate information regarding demand, pricing, new product, feed, medication, manufacturers (poultry, feed, medicine & vaccine), etc were considered important not only for the producers but also for the business development services.
8. Lack of adequate laboratory testing facility which is considered as a key to quality control of feed, medicine, chicks and disease control measure was identified as another major hurdle to inadequate quality and disease control practices.
9. Improper handling of medicine and vaccine was another cause of low productivity, low growth and high mortality of chicks which has a direct impact on both layers and broilers. The primary reason for this was identified to be inadequate number of trained medical practitioners and misuse of medication by some medical practitioners as well as agents under intense promotional campaign resulting from stiff competition from the manufacturers of drugs and vaccines.
10. Knowledge and practice on quality standards for feed, medicine, vaccination, and chicks is hardly visible. This has resulted in availability of spurious feed and medicine and wide variation in quality of chicks and other essential supplies.
11. Disaster management preparedness was another area of concern. It was strongly felt that majority of the actors across the chain including the government and NGO mechanisms are not equipped to handle disaster such as epidemic or even flood or other such natural disasters.
12. Inadequate publicity and negative promotion of the sector by the mass media was considered an impediment towards growth of the sector and low level of consumer trust. At the same time, the smaller farms (layers and broilers) did not have adequate financial strength to promote their contribution to the society which was considered essential for influencing the media as a promotional vehicle.
13. The role of Consumer Association of Bangladesh (CAB) in both monitoring the activities of the producers as well as educating the consumers regarding the

- produce was found to be highly lacking. This was also considered to be a major cause of unethical practices by few followed by negative media campaigning resulting in low consumer trust.
14. The dependence on the channel members both at the intermediate as well as the end product level was considered a major hindrance towards growth of the smaller firms. The problem is associated with price control, profit margins, inadequate information, quality control, unethical practices, and above all lack of integration and understanding across the poultry value chain.
 15. Access to working capital by the smaller firms in particular was considered a major hurdle. This has resulted in higher dependence on the channel members for loan and thus being dictated by them. On the other hand the financial institutions find the smaller firms as high risk clients since they operate under uncertainties of disaster and at the same time are difficult to monitor.
 16. The overall distribution management of chicks, eggs, medicine, vaccine, and poultry was identified as another cause of high mortality and low profitability. The transportation, packaging, and branding was considered as inadequate across the value chain. For example inadequate cool chain resulted in low efficacy of drug and vaccine, inadequate packaging resulted in high mortality of chicks, Poor packaging of eggs causes damage as well as bacterial infestation, inadequate branding results in low quality monitoring, etc.

Major Intervention Strategy

The intervention strategy is described based on the sixteen broad issues identified during the extensive three phase research. The implementation strategy was designed based on the outcome of the secondary research, and the two plenary sessions and has been discussed using a comprehensive approach.

1. ***Poultry Policy Guideline:*** This intervention strategy is directed towards strengthening the national poultry policy. The study clearly showed that policy is the backbone for long term success of the industry. One policy regarding the poultry sector has already been drafted which will require close assessment to ensure that issues that are specific to a certain member in the value chain and are considered extremely important is addressed. These issues may include elements related to bio-security measures across the value chain, setting standards for distribution chain for maintaining efficacy of drugs and vaccines, standards for setting quality of manufacturing practices of both medicine and feed, policy related to code of conduct of traders, issues regarding setting some standards on the academic syllabus of the veterinary education, etc. A group of donors, stakeholders may be formed to approach the government about policy to address issues outlined above. The donors may help in reassessment of the policy with participation of the major stakeholders, followed by discussion and modification of the policy. It maybe assumed that the follow up of the policy issues can be completed within 1-2 years. It was also presumed that donor group intervention is considered essential to ensure that the policy is comprehensive.
2. ***Symbiotic and Integrated Association:*** The association requires strengthening and at the same time integration of the various associations across the value chain as well as across geographical region is considered essential to ensure that the strategies can be implemented successfully. In this regard, the national poultry body (BPIA) will have to take the pivotal role and develop a working guideline to ensure a symbiotic relationship amongst the various smaller associations. The

national body is capable of undertaking the venture with some consulting support from any one donor agency. The national body should also be equipped to tackle disaster management and communicate with the media and CAB to ensure that both consumer as well as sellers rights are protected. Since USAID has been the prime mover of this project, they may take the initiative to select the donor partner and initiate the project. The time parameter can be set as immediate and can the initial guideline can be completed within six months. Once the guideline is completed, the members of various associations will be associated with the program to ensure integration in the sector.

3. ***Technological Efficiency:*** The technology issue at the grand parent and parent level was not considered lucrative for intervention since these firms have access to technology through their collaborative partners. However, the importance of technology was found seriously lacking at the layer and broiler farm levels. The study indicated both lack of technology as well as ignorance of the owners regarding benefit of technology. It is therefore recommended that an awareness building program on new technology may be launched with the help of donors and major drug producing companies using association of broiler and layer farms as the client. The program may be launched either through training modules or through distributing news items etc. This program initially will require subsidy from the donors or larger NGO such as BRAC. The program will be designed on a cost sharing basis and will show how the farms can assure financial benefit from the technology. Once the program has been launched, the association can continue to provide inputs to the industry through regular upgrading of knowledge bank. This intervention strategy can be initiated immediately after due discussion with association representatives. This will be an ongoing activity.
4. ***Bio-Security:*** Bio-security needs were found to be varying across the value chain. However, the issue of bio-security was considered critical since this is directly associated with the quality of food to be ultimately presented for human consumption. Thus bio-security should be dealt with separately. The first level of

implementation has been discussed through inclusion of bio-security measures as part of the policy paper. At the institutional level, since the type of bio-security varies across the value chain, different bio-security modules will have to be developed. However, the module needs to follow a standard generic model which should be developed in unison with other stakeholders so that some sort of standardization is maintained. For example, for grand parent farms location requirement, for layer farms internal management, for egg distributors cleaning of eggs, for processors hygiene, etc will be the basis. This program can be conducted with the help of the media agencies such as radio and television with sponsorship support from donor agencies, suppliers of bio-security goods and services such as large drug manufacturers, pesticide manufacturers, Parent farms, etc. The donor agencies can ask interested NGOs or other organizations to work as production houses for publicity of bio-security. These programs can gradually be transformed into commercially viable projects. Interested donor agencies can initiate discussion with probable sponsors, media, and production houses for looking at the viability of the project. The project can be initiated immediately and will be short to medium term in nature depending on how fast the solution is disseminated and implemented.

5. ***Technical and Managerial Training:*** Management and technological capability of small firms across the board has been identified as another major hurdle impeding growth. This will require practical training programs which should involve both theoretical as well as experimental or case study based training programs designed for various level and subject matters. As a starting point lessons can be gathered from **WINROCK-CARE** model since they have started to develop some training modules. However, one must bear in mind that a pure theoretical approach will not be effective and thus real Bangladesh or regional case based learning will help improve the situation. Donor agencies may initiate the program by inviting interested training institutions (management, health, technology, etc) as partners. Initial support for curriculum design, case building, training pedagogy, training of trainers, and promotion may be required from

donor agencies. Trainers to conduct training of trainers may be obtained from large corporations or academic institutions if required. The trainees will be asked to share costs and once the acceptability has been achieved, market based pricing will automatically be implemented by the training institutions. The program can be initiated immediately specially with regard to selection of training houses. The program can be implemented within six months to a year and will vary based on the type of training to be designed. The project will be ongoing in nature.

6. **Management Information System:** BPIA has already started work on developing a comprehensive and integrated information system for the sector. Further lessons may be collected from BGMEA especially in terms of transmission of information. Since the basic level of management of poultry sector is different from that of the garments sector, one must be careful in designing the transmission module. For example in the garments sector all firms are equipped with internet facility while it is the reverse in case of poultry. It is therefore assumed that the medium of transmission of information will be different. The likely candidates could be cell phone operators, internet providers using voice and wireless network, print media etc. The MIS will contain information regarding all cost factors, pricing of various outputs, sourcing of materials, announcement on programs, etc. The MIS thus will be housed centrally at BPIA and connected directly with regional and sub-sectoral associations. These on the other hand can be linked with respective members. The operational cost can be generated through membership fees. Initial technical support can be provided by donor agencies and the media operators to facilitate development of the system and the network. Participation of the media operators can be made more competitive through allocation of regions. The initial discussion with members of BPIA and media operators can be initiated immediately, while the overall implementation may take from six months to a year.
7. **Laboratory Testing Facility:** Laboratory testing facility for distributors, layer farmers, broiler farmers, and traders is envisioned as the basis for quality control

measures. The initial support can be obtained from BLRI. BLRI can be helped to develop regional offices both in terms of infrastructure as well as technology and human resources. At the same time Large NGO such as BRAC can be asked to strengthen their present testing facilities and make it available for all. However, to make these laboratories commercially viable strict adherence to compliance set by national poultry policy will be a pre-requisite. These testing facilities may also in the long run be involved in promotional effort as part of their commercial operations. Furthermore, the private sector involvement in this sector can be expected once the policy guideline is implemented.

8. ***Protection of Consumer Rights:*** Consumer Association of Bangladesh (CAB) will have to be strengthened to ensure that proper quality measures are being considered to protect the rights of the consumers. At present CAB is almost inoperative due to lack of both human as well as material resources. Since CAB is directly representing the consumers and not the sellers at large, it is difficult for them to sustain in a country like Bangladesh at least during the initial stages. Thus, it is a must that first of all initiative be taken to develop the basic human resource structure for CAB. Donor agencies can help CAB in taking the first step by following models of successful countries. Once this has been developed, CAB can take up programs that will work as a bridge between the consumers and the sellers. In addition consumer awareness building to a large extent will help maintenance of all types of standards. Donor agencies will be required to directly work with CAB in this program. Once CAB initiates the awareness building campaign it is expected that the public relations wing of socially responsible corporate bodies will come forward to support CAB. To make his effort successful participation of the media will be essential. In the short term perspective this project is expected to be donor driven with support from social and environmental activists and UN bodies.
9. ***Financing for Small Farmers:*** Financing for the smaller firms was identified as the major hurdle. This is partially because small firms stand alone are not a lucrative or safe venture. Financing can be obtained using group approach. This

can once again be done by forming cooperatives or clusters of individual farmers, where the cluster becomes big enough to market their own products as well as approach appropriate donors for assistance in terms of arranging working capital. Donors can be collaterals: Donors can ensure success of farms through technical services and training thus making it easier for financial institutions to fund such projects. The market can learn from the models of Doyel Agro, Patgram Lalmonir hat and Agro based Cooperative, Pabna. However, both the financial institutions as well as the poultry producers can be made aware of the existing success stories through leaflets or seminar conducted by BPIA with support from donor agencies. Once the financial institutions are convinced that the model is feasible, they will themselves take initiative to promote the idea to the farmers. This program can be initiated immediately and will be short term in nature.

10. ***Efficient Distribution System:*** Strengthening of distribution system will primarily involve the channel members i.e. distributors and traders. Since the distribution system plans to strengthen storage, transportation, packaging and branding aspects, one can assume that all these at present to a large extent are controlled by the distributors and traders. Furthermore, and efficiency building in these four areas will directly contribute towards profitability enhancement of the channel members. The storage and transportation issues are highly technical including minimizing of waste and maintenance of cool chain. This program can be conducted with the help of premium engineering university of the country (BUET). This may help in developing economical means to address the problem. The packaging and branding issues are more marketing issues requiring inclusion of safety, sorting, grading, and source tracking. Thus both a qualitative as well as image building issue can be addressed to motivate channel members to participate in this program. Management experts may be involved to implement this activity. Since the channel members are difficult to persuade, it is advisable that the donor agencies organize a forum to initiate idea exchange. Once this is achieved, individual associations can be involved in the program. This can be considered as medium to long term intervention strategy.

Concluding Remarks

In conclusion it is safe to suggest a donor initiated and donor specific implementation plan to ensure smooth and quick implementation of the program. USAID can take the lead role to arrange a donor consortium meet where they may show interest to participate in a specific activity of interest. This will ensure fast and smooth functioning devoid of duplication. At the same time it should be clearly understood that a national monitoring cell will be required to ensure that integration of activities is in place. This task can be jointly conducted by the donor consortium and the apex poultry association.

The intervention strategy is further designed to ensure long term sustainability and acceptability of the stakeholders. To meet this end, the intervention strategies must be designed on a cost sharing strategy and must be private sector driven. However, to ensure cost efficiency and policy support, the role of the government and participation of the non governmental organizations has been considered of prime importance.

The intervention program stresses on maintaining of global standards as the ultimate measure of sustainability. This approach is expected to result in consumer satisfaction and ensure fostering under global environment.

Annexure

ANNEX ONE:
BIBLIOGRAPHY

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**ANNEX TWO:
DATA COLLECTION INSTRUMENT**

Check list for Farmer Survey

Broiler/Layer

1. Name of Farmer: _____
2. Number of chicks per shed: _____
3. Number of Sheds: _____
4. Who manages inputs and production of farm: _____
5. Source of Feed: _____
6. Average weight of DOC: _____
7. Average weight of birds at harvest: _____
8. How is bio-security managed: _____
9. How technically sound is the management: _____
What tech training has manager had?
10. How is Feeding tray managed: _____
11. Mortality rate: _____
12. Who takes all products at harvest: _____
13. Who fixes the price: _____
14. Additional issues that maybe be mentioned in this sector: _____

15. Age of the farm? _____
16. Growth rate of the farm? Chicks per cycle from inception _____
17. Profitability of farm? Owner borrowing money _____

ANNEX THREE:

VALIDATION WORKSHOP PLAN

Issues and Interventions in Poultry Sector



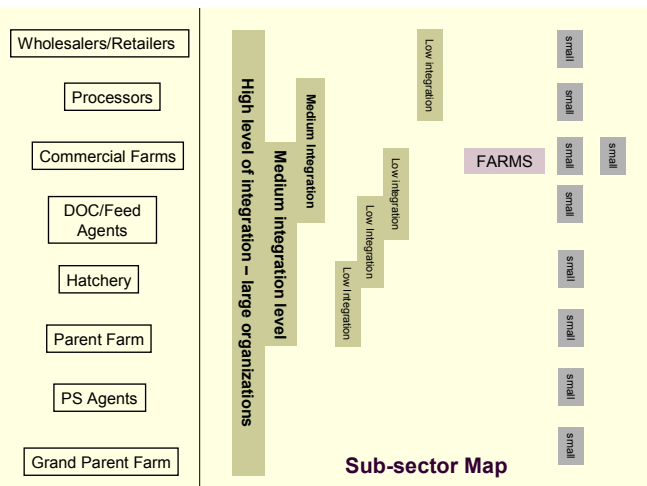
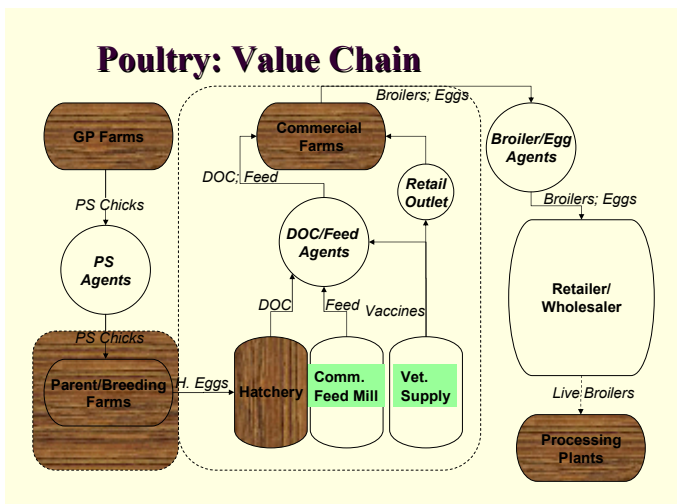
Team Members

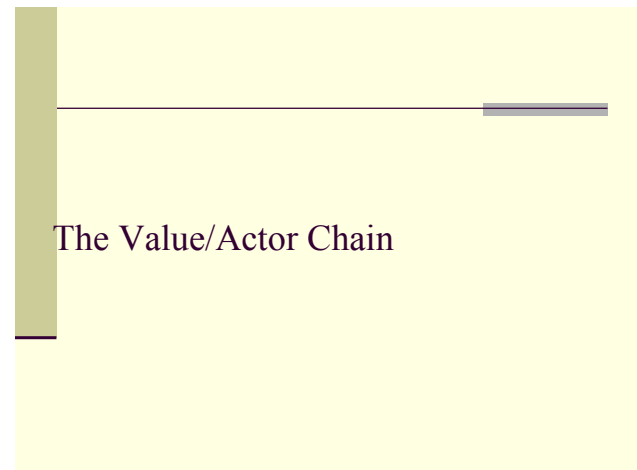
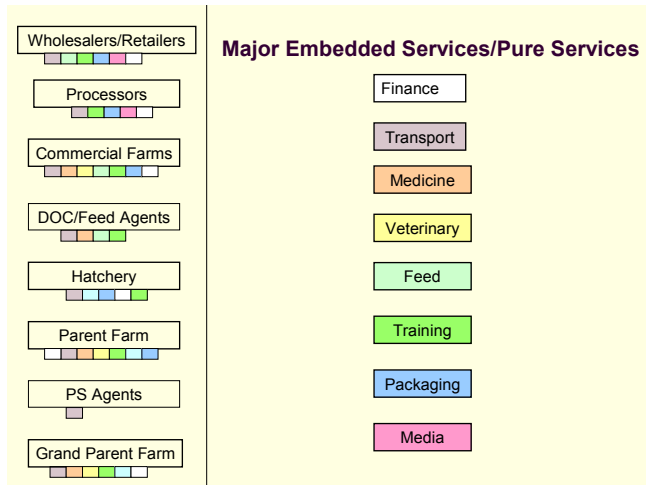
- Syed Ferhat Anwar – Professor, IBA
- Rouham Manzoor – Consultant, ATDP
- Shadab Sajid – Associate, Investment Services
- Faiza Ahad – Manager, Secondary Information

Methodology of the Workshop

- Phase One: Presentation of Research Findings - Major Issues.
- Phase two: Validation of the major Findings – Major Issues.
- Phase three: Prioritization of the major Issues.
- Phase four: Intervention Mechanism – Identification of mechanism and partners.

Sector Map Analysis





Grand Parent Farms

- Lack of Technical know-how: Both technology as well as trained people to handle the technology
- Policies on Bio-security: Physical environment
- Lack of experience: knowledge base in handling crises
- Lack of research in genetic engineering

Parent/Breeding Farms

- Bio-security: Overcrowding of various industries in one geographic location
- Unavailability of quality disease control measures: Limited diagnostic facility – both in terms of quality service, number of facility and equipment
- Lack of disaster management experience – no updating done
- Inconsistent quality – feed, vaccine, and medicine
- Lack of waste management
- Potential for export of hatching eggs – No specific government policy regarding export benefits
- Management of farm: Transport of eggs, checking infertility of eggs, etc.

Hatchery

- Lack of diagnostic and testing facilities
- Mismanagement of waste
- Eggs used are not graded according to age of mother
- Weak association of hatcheries: Small farms
- Size of hatchery not economically viable: Too small
- Promotion not enough from media. Too much of negative publicity

Agents/Traders

- Lack of price monitoring: Non existence of MIS
- Low ethical code of conduct
- Licensing for food and drugs sales: No monitoring
- Lack of medical support: Trained avian pathologist, nutritionist, etc.

Commercial Broiler Farms

- Availability of consistent quality disease free chicks: Lack of grading
- High variation in cost of rearing: chicks, feed, medicine, vaccine, management
- Lack of availability of quality feed ingredients
- Working capital requirement: Lack of financing
- Bio security: Lack of awareness and training
- Ineffective vaccine: Due to quality and storage
- Abuse of antibiotics/medicine
- Unavailability of technical support
- Unavailability of appropriate diagnostic facilities
- No database on prices

Commercial Layer Farms

- Egg producers association very weak
- Egg sellers association/Arottdars control price: No MIS
- High variation in cost of rearing: chicks, feed, medicine, vaccine, management
- Ineffective vaccine: Due to quality and storage
- Unskilled Labor
- Bio security: Lack of awareness and training
- Illegal import of eggs
- Working capital requirement: Lack of financing
- No monitoring of egg quality: grading, safety seal, etc.

Processors: Formal & Informal

- Growth of inefficient, unhygienic, and untrained informal processors
- No policy guideline for monitoring
- Bio security in maintaining inventory and selling live birds
- Full range of technology at the formal processors level not available
- Lack of trained human resources at the formal processor level

Embedded Services

Feed

- Availability of quality feed ingredients or substitute
- Price of ingredients
- Least cost feed formulation not an industry wide practice: Lack of awareness
- Very small margins for feed producers

Medical services

- Unavailability of quality vaccine
- Laboratory for testing efficacy of commercial vaccine not available
- Improper handling of medicine reducing shelf-life and efficacy: Cool chain
- Veterinary service not always available to small farmers
- Lack of quality veterinary expertise: Misuse of medication
- Lack of diagnostic services

Packaging & Transportation

- Lack of proper transportation services causing damaged medicine, vaccine, feed supplement, etc.
- Improper transportation methods for broiler causing stress and mortality
- Improper packaging and transportation method for eggs causing wastage
- DOCs are sometimes improperly transported for long hours: High stress finally results in low growth, low egg production, or even mortality
- Poor packaging of egg for end users causing damage as well as bacterial infestation: Type of package use and cleaning

Storage

- Lack of proper storage facilities for eggs causing lower shelf life
- Lack of storage for processed birds
- Lack of Storage facilities for feed ingredients causing variable quality and prices
- Lack of refrigerated storage facilities for processed poultry products
- Storage especially lacking in remote areas

Training & Development

- Lack of trained manpower: Management – commercial farm management as well as disaster management
- Lack of general awareness: across the sub-sector and the general mass
- Lack of effective vocational training facilities
- Lack of trained medical practitioners
- Lack of trained pathologists
- Lack of trained nutritionists

Finance

- Hard to get finance: Risky investment
- Hard to monitor farms
- High interest rates

Issues – Industry wide

- Lack of Technical knowledge
- Lack of Bio-security
- Lack of Market information system
- Lack of unified force in poultry industry
- Too many Middlemen
- Media awareness
- Lack of policy implementation and standardization
- Lack of quality trainers

Thank you for your valuable input

ANNEX 4:

VALIDATION WORKSHOP REPORT

Issues and Interventions in Poultry Sector: Workshop Report

USAID - ATDP II Undertaking

Date: June 6, 2005

Dhaka, Bangladesh

Introduction

The last decade saw significant changes in the agriculture sector of Bangladesh. These changes were reflected both in the areas of private sector investment as well as interventions by the government and donor agencies. Coming towards the third quarter of 2005, United States Agency for International Development (USAID) is taking a lead role and making an attempt to create a strong panel in the agriculture sector so that in future, interventions in this segment may be coordinated between the stakeholders, the government, as well as other donor agencies involved in this sector. The first of these sessions with coordinated effort from Agrobased Industries and Technology Development Project Phase II (ATDP) was held on poultry to identify the issues and interventions along the value chain of this sector

The Poultry industry is one of the largest contributors to GDP and employment of Bangladesh. Over the eighties and early nineties this industry flourished tremendously and saw phenomenal growth. Towards the last decade however, the industry went through high variations in prices and very low margins most often leading to losses especially for commercial broiler and layer farmers. In addition, the industry is facing problems associated with technology changes and proper health care measures. Based on the above it is considered appropriate that a direction for future intervention be outlined to ensure steady growth of the industry.

Study Objective

The following were the broad objectives of this study

1. Identification of the major problems in the poultry sector.
2. Prioritization of the problems.
3. Determination of broad guideline of intervention strategies.

Methodology followed

The first step towards solving any problem would be at first to identify the problem correctly and then pursuing the right solution. USAID along with other donors wants to understand the issues in the poultry sector and in turn the intervention mechanisms required to address the problems. To do this, a primary research along with an extensive secondary research was conducted by ATDP on the poultry industry and the issues for each component of the value chain and service providers identified. The issues identified during the research were then put forward in front of a group of donors, donor agencies, industry stakeholders, and the government for validation and prioritization of the most pressing issues for each component of the value chain along with the Business Development Services (BDS) of the sector. Once the issues were validated, and ranked according to its relative significance, the study plans to outline broad intervention strategies which will address each of the prioritized issues. The interventions for each of the issues will clearly delineate the mechanism for intervention, the time it will take to implement the intervention, the kind of financing required for the intervention, and most importantly the partner (donor, donor agency, government or industry) which will implement the intervention. It might be noted that there could be more than one intervention mechanism in place along with the partner involvement for addressing the same issue.

Participants

The Validation workshop was attended by representatives from the government, several donors and donor agencies as well as industry representatives from each actor of the value chain and some BDS providers. The following is a list of the participants

Issues and Interventions in Poultry: Final Report

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Golam Morshed ATDP II	Nii Akwei Acquaye ATDP II
Nils Den Tex Care	

Identification of the Major Issues

The list of issues/problems identified in the primary study, the secondary literature, and the validation workshop under each component of the value chain are identified below.

Grand Parent Farms

- Lack of Technical know-how: The farms have inadequate technology and trained human resources to handle the technology. Example, the technology is changing fast and the transfer of technology is primarily done at the first level (i.e. suppliers to GP management). However, the GP farms do not have the internal capacity to further train the members of the stake holders. Both technology as well as trained human resources to handle the technology has been identified as constraint.
- Policies on Bio-security: Physical environment. Example Existence of neighboring poultry farms or other industries is a threat to the bio security of such farms.
- Lack of experience: knowledge base in handling crises. Example, the management does not have adequate experience in handling crises such as floods or disease outbreaks.
- Lack of research in genetic engineering. Example, The private sector were of the opinion that they are entirely dependent on the suppliers regarding genetic engineering related to producing breeds based on local environment. At the same time Bangladesh does not have adequate facility or training to develop local breeds.
- Lack of adequate Lab Facilities: The country does not have adequate laboratory facilities for ensuring quality of the chicks and also disease control.

Parent/Breeder Farms

- Bio-security: Overcrowding of various industries in one geographic location. Same explanation as in the earlier section.
- Lack of adequate Lab Facilities: same explanation as in the earlier section.
- Lack of disaster management experience – no updating is done to train the management personnel as well as the service providers in updating them on new disease or other disaster preparedness activities.
- Inconsistent quality – feed, vaccine, and medicine. Example: Adulteration of feed/feed ingredients, ii) low efficacy of vaccine and lack of proper cool chain enforcement, iii) sub-standard quality medicine iv) Chicks under high stress due to transportation, etc.
- Lack of waste management. Example: Waste emanating out of the farm is not disposed of properly due to limited understanding of the waste management system and inadequate facilities available with Municipal Corporation.
- Inadequate management and technical expertise: same interpretation as in earlier section
- Potential for exports of hatching eggs – No specific government policy regarding export benefits pertaining to poultry sector is available.
- Management of farm: Example: Management capability is not satisfactory resulting in situations such as inefficiency of handling transport, checking infertility, ensuring high productivity, etc.

Hatchery

- Lack of diagnostic and testing facilities: explanation addressed in earlier sections
- Over all management. Example: Absence of proper waste (solid & liquid) management. ii) No proper grading of DOC. iii) Lack of routine hatch analysis. iv) Bio security issues not addressed, etc.
- Code of conduct – Example: Inter purchases of hatching eggs between breeder farms. As a result, Day Old Chicks (DOC) maternal derived anti-body (MDA) level differs.
- Weak association of hatcheries: Small farms. Example: Hatcheries which are not integrated with Breeders face problems as part of the association since they are weak and small.
- Size of hatchery not economically viable: This is only true for those who are smaller in size.

- Lack of media promotion. Negative media publicity. Example: Absence of positive promotional campaigns in media geared towards growth. However, negative information is hastily publicized creating panic in the market.
- Excess supply. Example: lack of contractual agreement, absence of controlled production, lack of information, no intra-industry coordination, etc.
- Database with reference to market information. Example: Lack of a systematic or reliable information within the poultry industry on market conditions, demand and supply is considered a constraint.

Agents/Traders

- Lack of price information. Example: Non existence of Market Information and System (MIS) results in lack of market information and thus increased inefficiency.
- Low ethical code of conduct. Example: Lack of trust amongst competitors resulting in blaming each other for unethical practices.
- Licensing for drugs sales. Example: A large number of agents/traders are doing business without a proper drug license.
- Lack of medical support. Example: Trained avian pathologist, nutritionist, and poultry specialist are not easily available.
- Lack of transparency and commitment. Example: There is lack of commitment between the hatcheries, farmers and agents/traders. This causes the weaker group to suffer price inconsistencies and loss.
- Lack of capacity for disseminating technical advice. Example: Agents lack capacity in giving sound technical advice to farmers with regards to the products that are being sold to them.
- Consistency of feed quality and DOC. Example: There is adulteration in feed and feed ingredients. Also there is mixing of different grades of DOC. example Grade A DOC is bundled together with Grade B / C DOC and sold as Grade A.

Commercial Broiler Farms

- Lack of grading. Example: Availability of consistent quality and disease free Grade A chicks
- High variation in cost of rearing. Example: Variable DOC price, high feed/feed ingredient price, high medicine / vaccine, management cost results in costs variation
- Lack of availability of quality feed ingredients. Example: Majority of feed ingredients is imported and most are of different grade than the optimal variety also locally made feed ingredients are adulterated.
- Lack of Access to Working capital. Example: Cost of borrowing is high and also financial institutions consider this industry as high risk.
- Bio security: Lack of awareness and training. Example: Most Small farmers don't have the right concept and training on Biosecurity causing very low productivity.
- Ineffective vaccine: Due to quality and storage. Example: Lack of maintenance of cool chain renders a substantial percentage of vaccines ineffective.
- Lack of technical/business knowledge. Example: Stakeholders enter the business without proper knowledge of the industry, market forces. This results in abuse of antibiotics/medicine, low productivity, etc.
- Inadequate technical support. Example: Small commercial broiler farmers cannot afford the technical support and also are not extended enough support from other members of the value chain required for optimal productivity.
- Unavailability of appropriate diagnostic facilities. Example: No effective diagnostic facilities are available which can provide results on chicks and feed in a timely and effective manner.
- No database on prices. Example: Farmers are buying their products without proper knowledge of the market prices; in turn the same is happening when they are selling their stock putting them at a special informational disadvantage.

- Absence/inability of marketing efforts. Example: Marketing efforts and price is controlled by middlemen. Furthermore, lack of understanding of marketing techniques further puts them in a disadvantageous position.

Commercial Layer Farms

- Egg producers association very weak. Example: Egg producers do not have a stronger lobby for controlling the price of their products resulting in them getting poor price.
- Egg producers are dependent on Arottdars/Middleman. Example: Producers are dependent on the middlemen who control the market price and conditions. The producers are the price takers and have to accept what middlemen impose on them.
- High variation in cost of rearing. Example: High variation in Day Old Chick price, feed/feed ingredient price, and also high medicine, vaccine, increases management cost.
- Ineffective vaccine. Example: Lack of maintenance of cool chain renders a substantial percentage of vaccines ineffective.
- Unskilled Labor. Example: Most labors used are untrained and causes low productivity
- Bio security. Example: Very little concept, knowledge and implementation of bio-security measures causing high mortality and low productivity
- Illegal import of eggs. Example: Whenever the price exceeds a certain level, eggs from India infiltrate the market via illegal sources.
- Working capital requirement. Example: Cost of borrowing is high and also financial institutions consider this industry as high risk.
- No monitoring of egg quality. Example: grading, safety seal, etc are not present resulting in difficulty of tracing the final produce to source which makes monitoring very difficult.
- Lack of overall management expertise. Example: Farms are poorly managed and thus incur high costs of production.
- Lack of quality DOC. Example: Chicks with different Maternal Derivative Antibody are sold together as well as high stress during transport.

Processors: Formal & Informal

- Growth of inefficient, unhygienic, and untrained informal processors. Example: Unhygienic way in which Chickens are processed in local market leading to unsafe and contaminated food.
- No policy guideline for monitoring: Example: Lack of an effective and efficient code of conduct or BSTI standard for poultry products is considered a serious setback.
- Full range of technology at the formal processors level not available. Example: Range of processed chicken products limited to skinned chicken and chicken nuggets, that too in a very limited quantity.
- Lack of trained human resources at the formal processor level. Example: Not too many people are aware of the variety in processed poultry products available and therefore trained human resources are even scarcer.
- Lack of storage facility to increase shelf-life. Example: Processed chicken because of its limited shelf life need to be refrigerated and such facilities are scarce in the country
- Lack of Consumer trust. Example: Culturally the majority of consumers have still not accepted processed chicken as safe and hygienic to consume.
- Lack of consumer awareness in regards to processed chicken. Example: most processed chicken items are not known to the general consumers because of lack of availability as well as promotion.

List of issues under each of the major BDS providers are listed below.

Feed

- Availability of quality feed ingredients or substitute. Example: Adulteration or poor quality of feed which results in poor production.

- Price of ingredients. Example: 70% of feed ingredients are still imported causing increased cost in freight as well as exchange rates.
- Least cost feed formulation not an industry wide practice. Example: Lack of awareness in using software for formulating feed with the same nutritional worth however cheaper ingredients.
- Very small margins for feed producers: Example: Fierce competition as well as inconsistency of feed ingredient supply causes very low margins for feed producers.
- No monitoring of feed quality: Example: Diagnostic facilities are limited causing unreliable results as well as unrealistic delays in getting result.

Medical services

- Unavailability of quality vaccine. Example: Vaccine for many of the common diseases is not effective.
- Lack of diagnostic services. Example: it is impossible to test quality of vaccine because of unavailability of laboratory.
- Cool Chain not maintained. Example: Many vaccine and medicine require maintaining its efficacy. Unavailability of cool chain causes damaged products
- Veterinary service not always available to small farmers. Example: Small farmers find it extremely difficult to avail medical facilities because of high overhead costs associated with Veterinarians.
- Misuse of Vaccine and medication. Example: Lack of quality veterinary expertise. Companies and agents aggressive stance in order to increase their sales and in addition, farmers' lack of technical knowledge contributes to misuse.
- Existence of spurious companies. Example: Presence of sub-standard animal health product which is detrimental to the poultry industry.

Packaging & Transportation

- Lack of proper transportation services causing damaged medicine, vaccine, feed supplement, etc. Example: Cool chain is not maintained causing damage to mane of the medicine, vaccine and feed supplements.
- Improper transportation methods for broiler causing stress and mortality. Example: Broiler which are transported from remote areas to Dhaka goes through extreme forms of stress causing very high levels of stress and mortality.
- Improper packaging and transportation method for eggs causing wastage. Example: Eggs are transported in crates however the vehicle used causes high numbers of breakage.
- DOCs are sometimes improperly transported for long hours: High stress finally results in low growth, low egg production, or even mortality. Example: Broiler DOCs are very sensitive animals. A little change in their environments significantly affects their growth, and chances for survival. High stress during transportation of DOCs causes significantly reduced productivity for farmers.
- Poor packaging of egg for end users causing damage as well as bacterial infestation: Example: Eggs are sold at retail level in paper bags which are then stored in refrigerators at consumer's home. This process causes damaged eggs. Also, unclean eggs cause bacterial infestation when they come in contact with other food products in the refrigerator.

Storage

- Lack of refrigerated storage facilities for processed poultry products. Example: Cool storage facilities is a requirement for processed poultry, medicine, eggs as well as other poultry products, however, they are not available in most cases causing huge variability in product quality and productivity.
- Lack of Storage facilities for feed ingredients causing variable quality and prices. Example: Because of the limited storage facilities and relatively short shelf life of feed ingredients, products cannot be stored over long period causing high prices during shortage and low prices during excess supply. If storage facilities were available then ingredients could be stored during times of excess supply and sold later at high prices.

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Training & Development

- Lack of trained manpower: Management – commercial farm management as well as disaster management. Example: exceptionally high levels of mortality and wastage all through the industry.
- Lack of effective vocational training facilities. Example: Very few training facilities exist in the whole country for developing human resource in poultry.
- Lack of trained medical practitioners, pathologists and nutritionists. Example: the whole industry suffers from Lack of professionals in the medical component of the poultry industry.

Finance

- Hard to get financed: Lack of industry knowledge, Risky investment. Example: Banks and financial institutions are not comfortable in lending to the industry due lack of knowledge about the industry in general, complications and high volatility.
- Hard to monitor farms. Example: Because of the relatively small size of small commercial farms it is hard for financial institutions to monitor each individual client.
- High interest rates. Example: Cost of finance is still prohibitively high in the country and special agribusiness interest rates still widely unavailable for small farmers.
- Absence of insurance services. Example: The poultry industry is considered to be a high risk industry; therefore banks tend to stay away. If insurance was available Banks would feel more comfortable in investing in this sector.

Prioritizing of Issues Requiring Intervention

In the aforementioned Validation Workshop, the various stakeholders identified several problems that were considered important for intervention. These problems are listed below against each member of the value chain and BDS providers. Each problem is backed by a justification of choosing the problem for intervention.

Grand Parent Firms

Rank 1 – Specific policies related to members of the value chain.

Justification – Policies need to be set first prior to proper implementation.

Rank 2 - Lack of Technical know-how.

Justification – For the industry to be truly successful, the staffs who are involved in the day-to-day activities and handling of the farms require proper training

Rank 3 - Lab Facilities

Justification – Diagnostic facilities will ensure the quality of the chicks.

Rank 4 - Lack of experience in crises management.

Justification – Any crises can wipe the entire industry and thus necessary control measures need to be in place.

Parent Farm

Rank 1 - Unavailability of quality disease control measures.

Justification - Diagnostic facilities will ensure the quality of the chicks.

Rank 2 - Inconsistent quality of feed, vaccine, and medicine and chicks

Justification: This will primarily ensure quality broilers and layers and also higher productivity.

Rank 3 - Inadequate management and technical expertise

Justification – For the industry to be truly successful, the staffs who are involved in the day-to-day activities and handling of the farms require proper training.

Rank 4 - Bio-security

Justification - This is essential to decrease mortality and increase productivity, food safety, etc.

Hatchery

Rank 1 - Excess supply of DOC

Justification - Will ensure demand management and price control and thus consumer welfare.

Rank 2 - Database with reference to market information

Justification – This will ensure proper supply management.

Rank 3 – Lack of media promotion.

Justification – This will help build awareness amongst the consumers and the producers.

Rank 4 - Code of conduct

Justification - This will ensure proper price for the farmers and will also take care of problems resulting out of mixing and heterogeneity.

Rank 5 – Over all management

Justification - For the industry to be truly successful, the staffs who are involved in the day-to-day activities and handling of the farms require proper training

Agent/Trader of DOC

Rank 1 - Lack of transparency and commitment

Justification – This will ensure a certain group not to be exploited in the value chain

Rank 2 - Lack of capacity for disseminating technical advice

Justification – This will ensure higher productivity for farmers.

Rank 3 - Lack of price information

Justification – The price information in the industry will ensure lesser variability in prices of poultry products and thus higher profitability and losses for the weaker players.

Rank 4 - Consistency of feed quality and DOC

Justification – This will ensure high productivity for the entire industry.

Rank 5 - Lack of medical support:

Justification – Trained avian pathologist, nutritionist, and poultry specialist are not easily available. Availability of medical support will be able to prevent disease and epidemics at all levels.

Rank 6 - Licensing for drugs sales

Justification – This will prevent spurious businesses from exploiting uneducated and unaware farmers.

Commercial Broiler

Rank 1 - High variation in cost of rearing

Justification – Addressing this problem will assure fixed profitability for farmers instead of the very volatile current situation.

Rank 2 - Lack of technical/business knowledge

Justification – Dissemination of information will ensure high productivity and profitability.

Rank 3 - Inadequate technical support

Justification – The technical support will help higher productivity, enhanced bio security, efficient waste management, and quality assurance.

Rank 4 - Absence/inability of marketing efforts

Justification – Marketing effort is essential to ensure demand management and development of consumer orientation amongst the players of the industry.

Rank 5 - Access to Working capital

Justification – Availability of working capital is a must for growth of firms. This will largely reduce the closure of farms and sustainable growth of the industry. Furthermore, this will also ensure maintenance of quality.

Rank 6 - Lack of grading

Justification – Availability of consistent quality and disease free Grade A chicks.

Commercial Layer Farm

Rank 1– Lack of financing

Justification – Availability of working capital is a must for growth of firms.

Rank 2– Lack of overall management expertise

Justification – Farms need to be better managed to reduce costs and ensure sustainability.

Rank 3– Egg producers are dependent on Arottdars/Middleman

Justification – Strengthening of the farmers will result in higher bargaining power and reduction in prices of eggs. Furthermore, proper participation of the Arottdars in activities beneficial for the industry needs to be developed.

Rank 4– High variation in cost of rearing

Justification –Managed costs of rearing is a must for growth of the industry. This will not only ensure higher profitability for the farmers but may also result in higher quality and better prices.

Rank 5– Lack of quality DOC

Justification – Increase in quality of DOC is perhaps the principle level of quality control to ensure better results at layer and broiler farm level.

Rank 6–Bio security

Justification –Bio security is a must to ensure healthy production which will ultimately help in maintaining a healthy human population.

Rank 7 –Ineffective vaccine

Justification – Maintenance of effective storage, handling, and dispensing of vaccine will ensure better health of birds.

Processors

Rank 1– Growth of inefficient, unhygienic, and untrained informal processors

Justification – The final level in the poultry sub sector are the processors, There is no doubt that any inefficiency at this level will destroy the bio security efforts put in at the earlier levels.

Rank 2– Storage facility to increase shelf-life

Justification – Improvements in the storage facility is a must to increase shelf life and to thus help in increasing the trust of consumers on processed chicken. This is important since availability of processed chicken can help maintaining of prices through ensuring higher level of supplies.

Rank 3– Consumer trust

Justification – Building of consumer trust by incorporating best practices in the entire business chain is perhaps a must to ensure growth of this sector.

Rank 4– Consumer awareness regards to processed chicken

Justification – To reduce risks associated with the production and supply of poultry higher trust and dependence on quality processed poultry is essential.

Feed

Rank 1– Availability of quality feed ingredients or substitute

Justification – Feeds maintain the weight and quality of both the broiler as well as the layers which results in the size of eggs.

Rank 2– No monitoring of feed quality

Justification – Proper lab and testing facility will ensure production of quality feed.

Medical Services

Rank 1– Improper usage of vaccine

Justification – Proper usage of vaccines will ensure lower costs, higher productivity, lower mortality, etc.

Rank 2– Cool chain

Justification – Efficiency in cool chain will ensure longer shelf life, higher efficacy, and finally better health management.

Rank 3– Misuse of medication

Justification – Reduction in misuse of medication and awareness building among the users will help ensure higher level (both quality and quantity) of service delivery by both the veterinaries as well as efficient use by the farmers.

Rank 4– Existence of spurious companies

Justification – Control over spurious companies will ensure easy monitoring of health practices and will certainly ensure proper health management.

Packaging and Transportation

It was identified in the workshop that in this category the main problems lie in transport facilities between the trader and farmer.

Justification - Ensuring proper transportation and packaging to reduce costs arising out of spoiled medicine, vaccine, feed supplement, etc. Furthermore, improving transportation and bio security, packaging methods for chicks, broiler and eggs to reduce stress and mortality, wastage, and bacterial infestation.

Storage

Rank 1 – Lack of proper cool chain and storage facility.

Justification - Maintaining proper cool chain and hygienic condition at all level of the poultry sector can not only maintain the quality but also aids in increasing productivity and higher profits.

Training and Development

The group agreed that all problems were equally important because lack of properly trained human resource is rampant in the entire industry can cause total failure of the industry as a whole.

Finances

Rank 1 – Lack of industry knowledge

Justification – The financial institutions require regular upgrading of knowledge regarding the technological advancement and risk minimization aspects included in the poultry industry so that they can calculate risk.

Rank 2 - Absence of insurance services

Justification – The financial institutions in general require help to ascertain proper designing of insurance policy to help decrease risks of investment.

ANNEX FIVE:
INTERVENTION WORKSHOP REPORT

Interventions in Poultry to address prioritized problems as discussed during the FGD

Grand Parent Farms

Issue #1: Specific Policies related to members of the value chain – bio security

Interventions:

1. One policy regarding this has already been drafted which is being reviewed by the government. This policy needs to be reviewed by the industry as well as donors to address bio-security issues specifically for the entire industry (Grand Parent Farm, Parent Farm, Hatchery, Commercial Broiler, Commercial Layer, as well as Processors). This policy now needs to be followed up by donor agencies with the government for faster implementation. It may be assumed that the follow up of the policy issues will be done within 1-2 years.

Issue #2: Lack of Technical know-how: Both technology as well as trained people to handle the technology

Interventions:

1. It was acknowledged that the technical needs will be identified by the industry. Donors would arrange the right technological intervention including the right consultants needed for training and disseminate the information as required by cost sharing basis. This dissemination could take place in the form of several training modules and programs, or technology transfer as required. The specific training needs have to be identified first.

Issue # 3: Lab facilities

Interventions

1. GP farms owing to the specific needs of their industry have their own lab facilities, however they might need to update their standards and this can be done through cooperation with donor agencies where the donor agency identifies the standard equipments and technical expertise. However the cost involved is shared between the donor and GP farm.
2. At this point there was also talk of the Association setting up a reference laboratory for the industry where once again donors identify the experts and standard laboratory equipments for the set up. This may be done if the association can fund this through their own subscriptions or through cost sharing with some other donors and government. *(This may be more applicable for required lab facilities for other members of the poultry industry)*

Issues # 4: Lack of experience: knowledge base in handling crises

Interventions

1. Build awareness- BLRI has already developed a plan for awareness building. It is possible for them to train people on awareness building and handling different disease in times of crisis
2. A contingency plan is required to be built from the Farmers side and the industry so that there is a clear plan of action in the event of crisis. This can be done through discussions among different stakeholders to identify crisis situations and possible methods. Foreign models may be replicated.
3. Donors need to strengthen the association through capacity building and identifying contingency plan to tackle different types of crisis.
4. Association needs to pool together a fund for handling crisis where government as well as donor may contribute. Last year the department of livestock gave back a huge sum to the government because they couldn't find areas of intervention. These moneys mane be accessed by the association by presenting their need to the government.

Parent Farm

Issue # 1: Unavailability of quality disease control measures: Limited diagnostic facility – both in terms of quality service, number of facility and equipment

Interventions:

1. This was already talked about in last section in areas of Laboratory facilities.

Issues # 2: Inconsistent quality – feed, vaccine, and medicine and chicks

Interventions:

1. Promotional campaign maybe conducted both by the association in terms of what kind of feed ingredients or feed to procure or where to procure them from. This maybe done by the feed, vaccine and medicine suppliers. Also such campaigns maybe undertaken by the association with the help of the donors, donor agency or the government in terms of what kind of ingredients to take and what to stay away from.
2. A group of donors, stakeholders may be formed to approach the government about policy to address players who are supplying substandard quality ingredients.

Issue # 3: Inadequate management and technical expertise

Interventions:

1. Suppliers already working on developing technical expertise. However trained human resources are not available. Some sort of a training facility might be put in place with the help of donors where the industry identifies the training need and the donors provide the expertise, training, technology or technical expert on a cost share basis or paid by the industry.
2. Same as addressed for Grand parent farms

Issue # 4: Bio-security: Overcrowding of various industries in one geographic location, Lack of waste management

Interventions

1. Part of the awareness building drive
2. Same as addressed previously

Hatchery

Issue #1: Excess supply – lack of contractual agreement, absence of controlled production, lack of information, no intra-industry coordination

Interventions:

1. This is a short term intervention where the association will be able to play a major role along with some capacity building effort from the donors.
2. Market Information Systems development: Association
3. Database similar to that of BGMEA can be formed at BPIA, BPIA collects as well as disseminates the information.
4. Form cooperatives (business service organization) - cut-off the middleman. Ensuring profit making (business model) to make it sustainable. (Ensure govt. allocates store space for coop. at every local government market)

Issue #2: Database with reference to market information

Interventions:

1. Some of the interventions already addressed in the previous section. BPIA might be able to develop an information system like the BGMEA. They have already started gathering information in this regard; however some help may be required from the donors in terms of setting up the infrastructure for such a database to be there.

Issue #3: Promotion not enough from media. Too much of negative publicity

Interventions:

1. Consumer awareness through positive media involvement. This may be done through building the capacity of Consumer Association of Bangladesh by donors.
2. Creating a focal point (association/industry stake holders) through which media may get information on a regular basis.
3. Donors may be able to play a vital role in terms of implementing programs which originated from assoc. or themselves
4. Educating the journalists to maintain close and positive relationship with the poultry industry or vice versa
5. This is a short to medium term activity where financial involvement might be quite substantial depending on marketing strategy. The groups involved will be the Poultry association, donors, and facilitators as well as maybe CAB.

Issue #4: Code of conduct – inter purchases of hatching eggs

Intervention:

1. Intervention in this regard is mostly policy related, however education needs to be administered to the hatcheries to prevent such activities; mixing of hatching eggs have consequences which flow through the supply chain and pose substantial threats for farmers. Donors may get involved in such training, awareness building,

Issue #5: Overall management

Interventions:

1. This is entirely a training issue which has already been discussed.

Traders/Agents

Issues # 1: Lack of transparency and commitment between traders and hatcheries

Interventions:

1. Ethics issue- awareness building of the farm owners. If farmers are trained on the correct code of conduct then they may be able to fend off these unnecessary and unwanted interventions by the traders

Issue #2: Lack of capacity for disseminating technical advice

Interventions:

1. Training modules need to be developed for training throughout the value chain. This may be done by the donor agencies (Winrock already started this work and is at initial stages). Once training module has been developed such training should be administered to the target group
2. Traders and agents need to be properly trained so that they in turn provide accurate information to farmers, as in a lot of cases the traders and agents are the main source of information for a lot of the farmers.
3. BPIA may develop a training module and train the regional associations (govt already has its own facilities but has not been very effective)
4. Donors can provide assistance

Issue # 3: Lack of price information: Non existence of MIS

Interventions:

1. Once the BPIA develops its own database and Information systems, Traders, Hatcheries as well as farmers would be able to access information more centrally. This will be a medium to long term, expensive intervention which maybe supported by donor agencies along with BPIA subscription.

Issues # 4: Consistency of feed quality and DOC

Interventions

1. This is once again a policy issue which needs to be addressed for the sustainability of farmers.
2. A way of testing quality of DOC would be to have DOCs examined at regular intervals for correct maternally derived antibodies or other factors which provide information about the quality of the chicks. Once again for this a reference laboratory is required which the poultry industry can depend on for reliability as well as timely results. As discussed earlier such a laboratory facility may be set up with funds from the industry or private organization along with technical expertise from the donors and donor agencies.

Commercial Broiler

Issues # 1: High variation in cost of rearing: chicks, feed, medicine, vaccine, management

Interventions:

1. It can be addressed thru MIS and training program as mentioned earlier

Issue #2: Lack of technical/business knowledge of farmers

Interventions:

1. Trainers: Suppliers (Novartis) as well as other donor agencies. Once a training module has been formed along the entire poultry sector value chain, some players like Novartis maybe able to fund such training activities. As there are quite a large number of farmers who need this technical/business knowledge, some donors may also come in and provide trainings. However the training program needs to follow a standard generic model which should be developed in unison with other stakeholders so that some sort of standardization is reached.
2. A Standard training module needs to be developed to be used in general - donors can assist
3. Identify the training houses- donors have link with the training houses

Issue #3: Inadequate technical support

Interventions:

1. Training: Also NGOs may be involved in providing regular technical support for farmers.
2. Clusters of farmers maybe formed whereby the central body maybe able to pay for technical services as required from veterinarians or "Para-vets"

Issue #4: Lack of consumer trust

1. CAB can play a vital role- distribute manuals, media advertisements, etc. to raise consumer awareness and trust
2. On the same token proper use of antibiotics and standard code of conducts need to be enforced along the industry. This may be headed by the BPIA with support from donor agencies so that quality is also unquestionable.

Issue #5: Absence/inability of marketing efforts

Interventions:

1. Market Research- Investigate the existing demand/supply situation prevailing in the country and what can be done to fix the problems. Such researches are done by donors; however the association may be able to influence such researches through higher educational institutions or research institutions.
2. Compile the research, come up with findings and disseminate the reports
3. Compile the best practices and disseminate as e.g. booklet

4. It might be difficult for individual farmers to conduct their own marketing, however group of farmers may also be able to join together and carry out their own marketing by setting up stores, transportation etc. The lead role maybe once again be taken up by the association as well as other donor agencies.

Issue # 6: Access to working capital:

Interventions:

1. This can once again be done by forming cooperatives or clusters of individual farmers, where the cluster becomes big enough to market their own products as well as approach appropriate donors for assistance in terms of arranging working capital.
2. Donors can be collaterals: Donors can ensure success of farms through technical services and training thus making it easier for financial institutions to fund such projects.

(Models to follow: Doyel Agro, Patgram Lalmonir hat and Agro based Cooperative, Pabna)

Commercial Layer Farm

Issue #1: Working capital requirement: Lack of financing

Interventions:

1. Same as above

Issue #2: Lack of overall management expertise

Interventions

Same as above

Issue # 3: Egg producers are dependent on Arottdars

Interventions:

1. The dependence is mainly due to working capital requirement which is currently being financed by the Arottdars and secondly because egg producers are usually too small themselves to market their own products. Both these problems maybe handled by forming a group/cluster/cooperative of farmers where by they can market their own products through sales centers and they can also approach financial institutions with the help of facilitators/donor agencies for financing their working capital requirement

Issue # 4: High variation in cost of rearing: chicks, feed, vaccine, medicine, mgmt

Interventions:

1. This once again has been addressed before. An industry wide information system is required. Stronger cooperative bodies/association needs to be formed for information dissemination

Issue # 5: Lack of quality chicks

Interventions:

1. Labs need to be efficient and user-friendly for the poultry industry. As of now the government has the only properly equipped lab however lacks in providing quality service. A proper lab may be developed for use in the private sector whereby a donor/agency can provide the proper equipments and technology. A commercial motive will ensure proper and adequate service.
2. Feed, vaccine, medicine need to maintain quality and thus in policy there should be provisions that breeder farms provide certification on diseases which can be caused thru their operations. Such provisions exist in our neighboring country India.

Processors:

Issue # 1: Growth of inefficient, unhygienic, and untrained informal processors

Interventions:

1. Awareness creation through involvement of media. CAB or the BPIA may be able to play a vital role in this regard.
2. Training to these “informal” setups for more hygienic methods of production.

Issue # 2: Storage facility to increase shelf-life

Interventions

1. This needs to be promoted industry wide. Mainly is a financing issues for “informal” retailers
2. this point was not discussed as there were no processors present

Issue # 3: Consumer Trust: Bio security in maintaining inventory and selling live birds and Quality Control and assurance

Interventions:

1. Consumer awareness program by CAB

Issue # 4

Consumer awareness regards to processed chicken

Embedded Services

Feed

Issue #1: Unavailability of quality feed ingredients or substitute

Interventions:

Already addressed

Issue # 2: No monitoring of feed quality

Already addressed. The apex body/Association/Government will need to have policy in place to monitor the quality of feed. Such monitoring through regular testing will ensure proper feed

Medical Services

Issue # 1: Improper usage of vaccine

Issue # 2: Improper handling of medicine/vaccine reducing shelf-life and efficiency: Cool Chain

Issue # 3: Lack of quality veterinary expertise: Misuse of medication

120 companies operating at present, There’s a draft government policy, Chittagong govt. vet college, Para vet Model= Winrock + CARE

Interventions:

1. Consumer awareness drive- funded by donors
2. Awareness drive for the agents: motivational aspects- sell quality drugs

3. Design motivational campaign- funded by the suppliers e.g. Novartis
4. Training for farmers- help them identify bad/good medicines
5. Training of the poultry sectors: train the vets- NGOs can help
6. Chittagong Government Veterinary College as well as other veterinary colleges are currently actively involved in producing quality veterinarians and it may be predicted adequate supply of veterinarians within 5-10 years

Issue # 4: Existence of spurious companies

Interventions:

1. might be a policy issue
2. identification of such companies may be done by Association and or farmers through reporting of bad experiences

Packaging and Transportation

Issue # 1: Improper transportation methods for broiler causing stress and mortality

Interventions:

1. Proper transportation packaging needs to be used for transporting chicks. For this it is not required to reinvent the wheel however to just replicate models followed by more countries with more developed poultry industry. If the costs of replicating the more developed model is financially not feasible then it might be required to develop local equivalents through r&d.

Issue # 1: Improper packaging and transportation method for egg causing wastage

Interventions:

1. Same as above.

Issue # 1: DOCs are sometimes improperly transported for long hours:

High stress finally results in low growth, low egg production, or even mortality

Interventions:

1. Same as above

Issue # 1: Poor packaging of egg for end users causing damage as well as bacterial infestation: Type of package use and cleaning

Interventions:

1. eggs need to be washed to make it bacteria free before being transported or sold at the wholesalers or retail level. Technical assistance need to be provided (most suited to donors) so that such interventions can be taken.
2. Presently eggs are sold in paper bags which have high chance of breakage, and also potential for contaminating other food items when stored in refrigerator. Private sector organizations may come up to invest in egg packaging plant to provide recycled paper packaging or similar packaging which can reduce wastage as well as contamination. Donors, donor funded agencies or the association may be able to disseminate information of such opportunities, or feasibility studied.

Storage

Issue # 1: Lack of proper cool chain and storage facility

Interventions:

1. This maybe more of a market driven intervention whereby feasibility will determine such measures of establishing cool chain. Obviously there is damage in the poultry industry in terms of ineffective medicine and vaccine because of not maintaining cool chain. There is a huge cost involved with this. The industry has to determine the cost of establishing proper cool chain and the benefit in terms of how much such measures would save the industry.
2. The medicine suppliers might take a proactive role in this regard by providing traders and agents with proper refrigerators for maintaining cool chain.

Training and Development

Discussed earlier

Issue # 1: Lack of trained manpower: Management – commercial farm management as well as disaster management

Issue # 1: Lack of general awareness: across the sub-sector and the general mass

Issue # 1: Lack of effective vocational training facilities

Issue # 1: Lack of trained pathologists, nutritionists, biologists, quality control

Issue # 1: Lack of poultry veterinary practitioners

Issue # 1: Training of finance personnel

It has been established that train human resources in this sector in all areas has been extremely limited. This leaves for tremendous intervention opportunities for donor agencies, association as well as the government. A trained man power can elevate this industry to new levels of efficiency and excellence. Interventions may be in the form of providing training in regional level to forming a fully functional poultry training institutions which addresses all training needs for the industry. Huge resources are needed to be invested in this sector to properly address this issue and also this will be a long term intervention

Finances

Issue # 1: Lack of industry knowledge:

Issue # 2: High transaction cost for public sector banks

Interventions:

The government has funds such as the EEF for the agriculture sector which may be accessed by the poultry industry as well. From the poultry sector usually only the larger companies have been able to access the funds. Provisions need to be put in place so that this fund may also be accessed by smaller farmers or farmer groups. Also this fund needs to be increased so that more organizations may be able to take full advantage of these sectors.

Storage, Training & Development, Finance interventions (fin. Inv. #1) all part of training programs