Course Guideline On

"Food Security and Food Safety" Training

Duration: 28 November-02 December, 2021



National Agriculture Training Academy (NATA) Ministry of Agriculture Gazipur-1701 www.nata.gov.bd

Training on "Food Security and Food Safety" Training

Duration: 28 November-02 December, 2021

Course Management

Course Advisor:	Dr. A K M Najmul Haque Director General (In-charge) NATA, Gazipur
Course Director:	Md. Mahmud Hasan Director (Training) NATA, Gazipur
Course coordinator:	Mohammad Abdul Hamid Deputy Director NATA, Gazipur
Assistant Course Coordinator :	1.Banani Karmaker Senior Assistant Director NATA, Gazipur Cell phone: 01674866673
	2.Toufikun Nahar Senior Assistant Director NATA, Gazipur Cell phone: 01790828045

Contents

Sl. No.	Subject	Page
1	Introduction to NATA	01
2	Course at a glance	04
3	Course Contents	05
4	List of Resource Personnel	07
5	Faculty members of NATA	08
6	Class Schedule	12

Introduction to National Agriculture Training Academy (NATA)

1.1 The Academy

National Agriculture Training Academy (NATA) is the apex training institute for human resource development of officers (grade-9 and above) under the Ministry of Agriculture (MOA) for providing training on diversified fields of professional interest in agriculture sector. The Academy organizes various training programs related to modern agricultural technologies and office management issues throughout the year. The academy is established in Gazipur as Central Extension Resources Development Institute (CERDI) on 14 March 1975 with the financial assistance of Japan International Cooperation Agency (JICA). Afterwards, on 27 June 1984, CERDI was undertaken to the Training Wing of Department of Agricultural Extension (DAE). On 03 April 2013, Government of the People's Republic of Bangladesh abolished CERDI and established NATA as an independent organization of MOA and on 07 June 2014, NATA has been started its journey as a training academy.

After emergence as NATA, the Academy began its training functions with only 10 faculty members. Though Government approved strength is 184, at present NATA has 84 staff members including 34 faculty members.

1.2 Vision

National Agriculture Training Academy becomes a center of excellence for developing competent human resources in agriculture sector.

1.3 Mission

We are pledged to achieve the shared vision through:

- i. Development of skilled human resources of all organizations under MOA by imparting quality training, research and development and publications;
- ii. Enhancement of linkage between education, research and extension to endow agriculture service delivery system;
- iii. Building a network with reputed institutions of home and abroad for organizational capacity development; and
- iv. Fostering a culture of continuous learning for development of knowledgeintensive agriculture service.

1.4 Functions

NATA has been entrusted to perform the following functions:

- i. Develop skilled human resources of the government, semi-government, autonomous organizations under MOA through imparting training program on modern and sustainable agriculture technology and office management topics;
- ii. Transfer modern and sustainable agriculture technology developed by the research organizations obtaining higher yield of crops of the farmers;
- iii. Conduct demonstration, adaptive research and research of proven technologies;
- iv. Impart all sorts of in-service training with special emphasis on induction, foundation and senior staff course;

- v. Exchange publications, participants and resource persons in seminars, workshops, conferences and training among the stakeholders;
- vi. Advice government and other organizations on training, achieving food and nutrition security, ICT, transfer of agriculture technology, agro-based industries and conservation environments etc.;
- vii. Help government and policy makers in framing and analyzing agricultural policies;
- viii. Conduct different training activities of academy in consonance with provision of the public administration training policy, 2003; and
- ix. Perform all kinds of duties directed by the government.

1.5 Location of the Academy

The Academy is about 25 km away from the capital city Dhaka and 3 km away from Joydevpur Chandana Chowrasta towards Gazipur district head quarter. It is located adjacent to Bangladesh Rice Research Institute (BRRI) and occupied 49 acres of land. The academy provides the trainees an ample scope to get free access to the adjacent institutions like Bangladesh Agriculture Research Institute (BARI), Bangladesh Rice Research Institute (BRRI), Seed Certification Agency (SCA), Bangabondhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Telecommunication College, and other government offices in Gazipur.

1.6 Facilities

1.6.1 Physical Facilities

The Academy is well equipped with some physical facilities to run the training programs successful though it began its voyage recently. Existing facilities of the academy are as follows.

- Office building-4
- Training Complex-1
- Residential Building-15
- Class room- 7
- Laboratory (Subject wise technical)-4
- Plant protection museum- 1
- Conference room- 2
- Auditorum-1
- Library- 2
- Dormitory- 6
- Cafeteria- 2
- Greenhouse- 3
- Workshop-1
- Store-1
- Mosque-1

1.6.2. Digital Computer cum Language Lab. and IT facilities

There is two Digital Computer cum Language Lab in the Academy. It is located on the 1st floor of the Administrative building. IT facilities available include LAN and Wi-Fi and the whole campus under Wi-Fi coverage. To expedite foreign language learning, NATA set up a Digital Computer cum Language Lab as part of the Academy's drive for capacity building of government officials. Participants can avail the opportunity of learning the foreign language while they stay in NATA.

1.6.3 Recreational Facilities

The Academy has a recreation room with color T.V in the dormitory. The daily newspapers are also available in recreation room for the participants.

1.6.4 Linkage with other Training Organizations

NATA maintains good relations with other training Academies in the country including BPATC, RPATC, BCS Administration Academy, BIAM, FIMA and so on. NATA has a plan to collaborate with international training institutes for improvement its human resources. NATA also collaborate with national research organizations for research in agriculture sector.

1.7 Evaluation

Course coordinator and assistant course coordinators are given the responsibility to evaluate the participants. The course is evaluated during pre and post training situation. Furthermore, the participants are given the chance to evaluate the resource speakers by using a prescribed format.

1.8 Sessions

Every day the session is started at 9.20 am in the morning and ends at 5:00 pm in the afternoon. There are two refreshment breaks started at 11.30 am for snacks and 5.00 pm for tea as well as lunch with prayer-break at 2.00-3.00 pm respectively. Participants are advised to attend the class in time without fail for avoiding any kinds of disciplinary action.

Activities	Duration
1 st Session	9.30-10.30
2 nd Session	10.30-11.30
Tea Break	11.30-12.00
3 rd Session	12.00-1.00
4 th Session	2.30-3.30
Prayer and Lunch Break	1.00-2.30
5 th Session	3.30-4.30
6 th Session	4.30-5.00
Evening Tea	5.00-5.30

Daily Schedule

1.9 Norms to be followed during the training

- No casual leave is allowed during training period;
- Participants living in the dormitory are advised to follow the norms of the dormitory;
- The campus area is a "Non Smoking Zone". Participants are advised to refrain from smoking inside the Academy; and
- Participants are not allowed to enter the dormitory after 10:00pm at night.

Course at a glance

Objective of the Course:

One of the fundamental rights of the citizens stipulated in the Bangladesh Constitution is food security and food safety for all. Food security exists when all people, at all times, have access to sufficient, safe and nutritious food to maintain healthy and productive lives. The key elements of Food security and food safety are: a) availability of enough food from domestic production and/or imports to meet the demand, b) access of the food to all people at all times through enough income and affordable prices, c) proper hygiene and sanitary practices and safe water for utilization of food to have optimum impact on health and nutrition, and d) a regulatory framework in place and its proper implementation for controlling contamination to ensure food safety.

Trainees will study policy documents and institutional setup of National Food Policy, 2006 (NFP), Food Safety Authority, 2013 and Food safety authority, 2015 in Bangladesh including those related to key goals, strategies and challenges of the food security system and become familiar with methods and process formulating and implementing food security policies in Bangladesh.

Target population: Officer of 9th & above grade under the Ministry of Agriculture.

Duration of each session: 60 minutes.

Prerequisites of the course:

- To attend in the training class in time;
- To be present at least 99% of the classes otherwise certificate may not be awarded;
- Maintain the norms in dormitory and cafeteria;
- Absent from any session is not allowed without prior permission from the course coordinator even in case of emergency;
- Enthusiastic to learn and share ideas in training session; and
- Cell phone must be kept in silent mode.

Course Contents

SL No.	Title of the contents	
Module-1	Concept, Policies, Issues and Historical overview of Food Security and Food Safety	
1	Food security and Food safety concept and context.	
2	Food insecurity and Food waste: Challenges and Opportunities.	
3	Historical Overview of Food Security and Food Safety: Policy and its institutional framework.	
4	Food Safety landscape in Asia; Scenario of Bangladesh Agriculture .	
5	National Food Security Policy (NFP), 2006 and its perspective plan of action to ensure Food Security	
Module-2	Strategies for Sustainable production of Cereal, Non-cereal, Fruits, Vegetables, also Fisheries and Livestock and Mushroom for nutritional safety.	
6	Rice development strategies towards food security and safety : Vision 2050	
7	Strategies of sustainable production of some major & minor cereal crops for maintaining food security and safety in BD.	
8	Modern Technologies of Fruits and Vegetables production : Ensuring nutritional safety.	
9	Fisheries production: Its availability in Food security and nutrition safety and methods to promote it.	
10	Livestock production: Its availability in Food security and Nutritional safety .	
11	Mushroom development : Food and Nutrition safety.	
Module-3	Food Safety in Bangladesh: Achievement, challenges and opportunities, Threat of climate change in Food Security; Strategies and mechanism for ensuring food safety.	
12	Threat to Food Safety in BD: Achievement, Challenges and opportunities.	
13	Genetically Modified (GM)Crops, Its impact on food security & Human health.	
14	Threats of climate change and adaptable technologies to face the challenges (Crops, Livestock, Fisheries)	
15	Post-harvesting , handling ,processing , preservation and storage to reduce crop losses to ensure food safety (Importance of Market chain, Value addition/chain, GAP ,SOP).	
16	SDG's for Sustainable agriculture development and its relation with food Security and safety.	
Module-4	Food supply chain, Gender and Food hygiene; food safety in household and potential risk of public health due to malnutrition and adulteration	
17	Food and Nutrition situation in Bangladesh : malnutrition, Deficiency symptoms, BMI and Sources of micronutrient in Human Body	
18	Gender & Food Safety: Women's role in Food Hygiene and Nutritional safety in household.	

19	Food Consumption, Balanced diet & Nutritional demand: Different food challorie chart, SDR, BMR, Required self diet calculation (practice).
20	Ensuring Food safety through food chain: Heavy metal contamination; Use of chemicals, Hormones in Fruits & vegetables and its residual effect
21	National Food safety Act, 2013 and Food safety authority, 2015 and its institutional framework for food safety in BD.
22	Perspective Plan of action &Issues of Access to Food in Developing countries like Bangladesh (Group work & Presentation)
23	Food and Nutrition situation in Bangladesh: malnutrition, Deficiency symptoms, BMI and Sources of micronutrient in Human Body
24	Food adulteration and its effect on public health
25	The Dengue Epidemic in Bangladesh: risk factors and actionable items.

List of Resource Persons

SL. NO	NAME	DESIGNATION	MOBILE NO
01	A.K.M. Nurul Afsar	National Team Leader, IFSB for Safe Food Project & Former Director General (Food)	01760-660422
02	Dr. Moinus Salam	Freelance International Consultant	01855871938
03	Dr. Md. Gulzarul Aziz	Prof., Dept. of Food Technology & Rural Industries, BAU	01631748866
04	Dr. Md. Monirul Islam	Director, BARC, Dhaka	01777686866
05	Dr. Md. Ramizuddin Miah	Professor, Department of Entomology, BSMRAU	01552495584
06	Dr. Anil Kumar Das,	Consultant, FAO, Dhaka	01712150667
07	Dr. Md. Delwar Hossain,	Former Deputy Director, NATA	01855333570
08	Dr. Babul Chandra Sarker	CSO & Head, Pomology Division, BARI, Gazipur	01716009319
09	Dr. Rafiqul Islam	PSO, BARI, Gazipur	01711142846
10	Dr. Nirod Chandra Sarker	Former AD, DAE, Khamarbari, Dhaka	01552408152
11	Md. Jamal Uddin,	Former AD, DAE, khamarbari, Dhaka	01718214607
12	Muhammad Emdadul Haque	Muhammad Emdadul Haque Additional Director (Administration & Finance, Seed Certification Agency, Moa, Gazipur	01715373207
13	Abul Kalam Azad	Deputy Director, NATA	01940652412
14	Dr. Md. Lutfor Rahman	Veterinary Surgeon, District Veterinary Hospital, Gazipur.	01711064176
15	Jannatul Sahin	Senior UFO, Gazipur Sadar	01741203239
16	Dr. Shahiduzzaman Shuvo	Medical Officer, NATA	01671690200

NATA FACULTY MEMBERS

Photo	Name & Designation	Phone/Cell/ E-mail
	Dr. A K M Najmul Haque Director General (In-charge)	02-49272104 01819277114 <u>dgnata14@gmail.com</u>
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Training Course on Food Security and Food Safety

Duration: 28 November - 02 December, 2021

Daily Training Schedule

Working Day-01

Day- Sunday

Date: 28-11-2021

Time	Topics	Speaker/ Facilitator
09.00-9.15	Registration	Laki, SAAO
9.15-9.40	Inaugural	DG ,Course Coordinator & Faculty Members
9.40-10.00	Pre-evaluation	Toufikun Nahar, Sr.AD, NATA
10.00-11.00	Food security and Food safety concept and context.	Dr. Md. Delwar Hossain Former Deputy Director, NATA 01855333570
11.00-11.30	Tea break	
11.30-12.30	Food insecurity and Food waste: Challenges and Opportunities.	Dr. Md. Delwar Hossain Former Deputy Director, NATA
12.30-1.30	Modern Technologies of Fruits and Vegetables production: Ensuring nutritional safety.	Dr. Babul Chandra Sarker CSO & Head, Pomology Division, BARI, Gazipur 01716009319
1.30-2.30	Prayer & Lunch Break	
2.30-3.30	Strategies of sustainable production of some major & minor cereal crops for maintaining food security and safety in BD.	Dr. Rafiqul Islam PSO, BARI, Gazipur. 01711142846
3.30-4.30	National Integrity Strategy.	Abul Kalam Azad Deputy Director, 01940652412





Training Course on Food Security and Food Safety

Duration: 28 November - 02 December, 2021

Daily Training Schedule

Working Day-02

Day-Monday

Date: 29-11-2021

Time	Topics	Speaker/ Facilitator
9.20-9.30	Review of the previous day	Toufikun Nahar, Sr.AD, NATA
9.30-10.30	Livestock production: Its availability in Food security and Nutritional safety.	Dr. Md. Lutfor Rahman VS, District Veterinary Hospital, Gazipur, 01711064176
10.30-11.30	Food and Nutrition situation in Bangladesh: malnutrition, Deficiency symptoms, BMI and Sources of micronutrient in Human Body	Muhammad Emdadul Haque Additional Director (Administration & Finance, Seed Certification Agency Moa, Gazipur, 01715373207
11.30-12.00	Tea Break	
12.00-1.00	Rice development strategies towards food security and safety: Vision 2050.	Dr. Moinus Salam Freelance International Consultant, 01855871938
1.00-2.00	Threats of climate change and adaptable technologies to face the challenges (Crops, Livestock, Fisheries).	Dr. Moinus Salam Freelance International Consultant,
2.00-3.00	Prayer & lunch Break	
3.00-4.00	Genetically Modified (GM) Crops, Its impact on food security & Human health.	Dr. Md. Gulzarul Aziz, Prof., Dept. of Food Technology & Rural Industries, BAU, 01631748866
4.00-5.00	Gender & Food Safety: Women's role in Food Hygiene and Nutritional safety in household.	Dr. Md. Gulzarul Aziz, Prof., Dept. of Food Technology & Rural Industries, BAU, 01631748866





Training Course on Food Security and Food Safety

Duration: 28 November - 02 December, 2021

Daily Training Schedule

Working Day-03

Day-Tuesday

Date: 30-11-2021

Time	Topics	Speaker/ Facilitator
9.20-9.30	Review of the previous day	Toufikun Nahar, Sr.AD, NATA
9.30- 10.30	Threat to Food Safety in Bangladesh: achievement, challenges and opportunities.	Dr. Md. Monirul Islam Director, BARC, Dhaka 01777686866
10.30- 11.30	SDG's for Sustainable agriculture development and its relation with food Security and safety.	Dr. Md. Monirul Islam Director, BARC, Dhaka 01777686866
11.30- 12.00	Tea break	
12.00- 1.00	Food Consumption, Balanced diet & Nutritional demand: Different food challorie chart, SDR, BMR, Required self diet calculation (practice).	Dr. Md. Monirul Islam Director, BARC, Dhaka 01777686866
1.00-2.00	Food adulteration and its effect on public health	Dr. Md. Monirul Islam Director, BARC, Dhaka 01777686866
2.00-3.00	Prayer & lunch Break	
3.00-4.00	Mushroom development: Food and Nutrition safety.	Dr. Nirod Chandra Sarker, Former AD, DAE, Khamarbari, Dhaka 01552408152





Training Course on Food Security and Food Safety

Duration: 28 November - 02 December, 2021

Daily Training Schedule

Working Day-04 Date: 01-12-2021 **Day-Wednesday**

Time	Topics	Speaker/ Facilitator
9.20-9.30	Review of the previous day	Toufikun Nahar, Sr.AD,
		NATA
9.30-10.30	National Food safety Act, 2013 and Food safety authority, 2015 and its institutional framework for food safety in BD.	A.K.M. Nurul Afsar National Team Leader, IFSB for Safe Food Project & Former DG (Food) 01760660422
10.30- 11.30	Food safety authority, 2015 for ensuring safe food and food security.	A.K.M. Nurul Afsar National Team Leader, IFSB for Safe Food Project & Former DG (Food) 01760660422
11.30-	Tea break	
12.00		
12.00-1.00		
1.00-2.00	Ensuring Food safety through food chain: Heavy metal contamination; Use of chemicals, Hormones in Fruits & vegetables and its residual effect.	Dr. Md. Ramizuddin Miah Professor, Dept. of Entomology, BSMRAU 01552495584
2.00-3.00	Prayer & lunch Break	
3.00-4.00	Historical Overview of Food Security and Food Safety: Policy and its institutional framework.	Dr. Anil Kumar Das, Consultant, FAO, Dhaka 01712150667
4.00-5.00	National Food Security Policy (NFP), 2006 and its perspective plan of action to ensure Food Security.	Dr. Anil Kumar Das, Consultant, FAO, Dhaka

"Safe & Nutritious Food for all"



National Agriculture Training Academy Gazipur-1701 <u>www.nata.gov.bd</u>



Training Course on Food Security and Food Safety

Duration: 28 November - 02 December, 2021

Daily Training Schedule

Working Day-05

Day- Thursday

Date: 02-12-2021

Time	Topics	Speaker/ Facilitator
9.20-9.30	Review of the previous day	Toufikun Nahar, Sr.AD & ACC, NATA
9.30-10.30	Fisheries production: Its availability in Food security and nutrition safety and methods to promote it.	Jannatul Sahin Senior UFO, Gazipur Sadar 01741203239
10.30-11.30	The Dengue Epidemic in Bangladesh: risk factors and actionable items.	Dr. Shahiduzzaman Shuvo, Medical Officer, NATA 01763037171
11.30-12.00	Tea break	
12.00-12.30	Post-harvesting, handling, processing, preservation and storage to reduce crop losses to ensure food safety (Importance of Market chain, Value addition/chain, GAP, SOP).	Md. Jamal Uddin, Former AD, DAE, khamarbari, Dhaka 01718214607
12.30-1.30	Perspective Plan of action & Issues of Access to Food in Developing countries like Bangladesh (Group work & Presentation).	Md. Jamal Uddin, Former AD, DAE, khamarbari, Dhaka 01718214607
1.30-2.30	Prayer & lunch Break	
2.30-3.00	Post Evaluation	Senior AD & ACC, NATA
3.00-4.00	Closing ceremony	DG, Director, Course Coordinator/ Assistant Course coordinator & Faculty members

(Mohammad Abdul Hamid) Course Coordinator & Deputy Director (Soil Science) NATA, Gazipur.

