

**Training Course
on
Climate Smart Agriculture**

23-27 September 2018

Course Guidelines



**National Agriculture Training Academy (NATA)
Ministry of Agriculture
www.nata.gov.bd**

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on
Climate Smart Agriculture**

23-27 September 2018

Course Management

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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 30 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 knowledge-intensive agriculture service.

1.4 Functions

The 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-2
- Class room- 3
- Laboratory (Subject wise technical)
- Plant protection museum- 1
- Conference room- 1
- Auditorum-1
- Dormitory- 4
- Cafeteria- 1
- Greenhouse- 3
- Workshop-1
- Mosque-1

1.6.2. Digital Computer cum Language Lab. and IT facilities

There is one 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 asst. 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 9.00 am in the morning and ends at 5:00 pm in the afternoon. There are two health breaks started at 10.30 am for snacks and 03.30 pm for tea as well as lunch with prayer break at 01.05 pm respectively. Participants are advised to attend the class in time without fail for avoiding any kinds of disciplinary action.

Daily Schedule

Activities	Duration
1 st Session	09:15-10:15
2 nd Session	10:15-11:15
Tea Break	11:15-11:45
3 rd Session	11:45-12:45
Lunch & Prayer	12:45-02:00
4 th Session	02:00-03:00
5 th Session	03:00-04:00

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 10:00 pm at night.

Course at a glance

Agriculture is main force of Bangladesh economy which is completely dependent on the mercy of nature. Agriculture of Bangladesh is repeatedly affecting by different natural calamities every year. Now a days this natural calamities are becoming as more extreme as frequent due to climate change. As a result climate change risk and vulnerability in Bangladesh is increasing day by day. Vulnerable area of Bangladesh Agriculture is saline water intrusion, soil salinity, drought, flood, flash flood, uneven rainfall etc. which will hamper food production and food security. There is no alternative to shifting our farming from conventional agriculture to climate smart agriculture to combat these challenges and to ensure food security.

Climate smart extension, research and development plan is very essential to fight this challenge. Climate smart development in institutional and personnel level is very important to achieve this goal. To develop efficient man power on climate smart agriculture is essential. This module can play vital role to develop personnel on this issue.

Course objectives:

1. To improve participant's skills in designing and implementing climate smart agriculture in their own jurisdiction.
2. To develop advanced knowledge and idea on to increase their various aspects of climate variability and change
3. To develop knowledge of personnel working in agriculture sector for mitigation and adaptation to climate change to ensure sustainable productivity.

Target population : Officers of different organizations under 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

Training schedule on Climate Smart Agriculture

Duration: 23 -27 September 2018

Day -1 Date : 23/09/2018

Time	Topics	Methods	Speaker
08:30-09.00	Registration	-	Lucky
09.00-09.30	Pre evaluation		CC/ ACC
09:30-10:30	Inaugural session	-	DG/Directors/Faculties
10.30-11.30	Concepts and Causes of Climate Change: Scientific basis.	L & D	Dr.Abdul Muyeed Director Field Service DAE, Khamarbari, Dhaka
11:30- 12.00	Tea Break		
12:00-01:00	Climate change: Global Scenario	L & D	Dr.Abdul Muyeed Director Field Service DAE, Khamarbari, Dhaka
01.00-02.00	Lunch and prayer		
02:00-03:00	Impacts of Climate change: Bangladesh Context	L & D	Dr. Habib Mohammad Naser, PSO (Soil Science) BARI, Gazipur
03:00-04:00	Risks and Vulnerabilities to Climate Change	L & D	Dr.Habib Mohammad Naser, PSO (Soil Science) BARI, Gazipur
04:00-05:00	Climate Smart Agriculture: Concepts Evolution and Significance	L & D	Dr. Md. Mayen Uddin DD (Food Technology) NATA, Gazipur

Day -2

Date : 24/09/2018

Time	Topics	Methods	Speaker
09.00-09.15	Recap	-	CC/Participants
09.15-10.15	Challenges of Soil health management under changing climate	L & D	Dr. Jatish C. Biswas Ex.CSO and Head Soil Science Division, BRRI, Gazipur.
10.15-11.15	Soil and fertilizer management option for mitigation of GHG Emission		Do
11.15-11.45	Tea Break	-	
11.45-12.45	Introduction to Agriculture Machinery for Conservation Agriculture	L & D	Ashok Kumar Biswas DPD, Enhancement of Crop Production through Farm Mechanization Project - 2 nd phase Khamarbari, Dhaka
12.45-02.00	Lunch and prayer		
02:00-03:00	Introduction to Agriculture Machinery for Conservation Agriculture		Do
03:00-04:00	National integrity strategy (NIS)	L & D	Munshi mohammad Hedayet Ullah Ex.Director General. NATA

Day – 3 Date : 25/09/2018

Time	Topics	Methods	Speaker
09:00-09.15	Recap	-	CC/Participants
09.15-10.15	Innovation in Public Service Delivery	L& D	Dr. Md. Sayedur Rahman DD (Admin.), NATA
10.15-11.15	Effect of climate change on Biodiversity	L & D	Dr. Tariqul Islam CSO & Head Genetics & Plant Breeding Div. BARI, Gazipur
11.15-11.45	Tea break	-	CC/ACC
11.45-12.45	Context of Climate Smart Agriculture practices for adaptation to climate Change under submerged/flooded ecosystem in Bangladesh	L & D	Dr. Md. Golam Mostofa Sr. Assist. Director NATA
12.45-02.00	Lunch	-	-
02.00-03.00	Seedling production techniques of vegetable and spice crops on floating bed under submerged/flooded ecosystem	L & D	Do
03.00-04.00	Production techniques of vegetable and spice crops on floating bed under submerged/ flooded ecosystem	L & D	Do

Day – 4, Date : 26/09/2018

Time	Topic	Methods	Resource
09.00-09.15	Recap	-	CC/Participants
09.15-10.15	Sustainable Development Goal	L & D	Dr. Md. Abu Sayeed Miah DD, NATA
10.15-11.15	Conservation Agriculture	L & D	Dr. Md. Moshir Rahman, Professor, BAU
11.15-11.45	Tea break	-	CC/ACC
11.45-12.45	Mitigation and adaptation to drought by crop management for CSA	L & D	Dr. Md. Moshir Rahman, Professor, BAU
12.45-02.0	Lunch and prayer	L & D	
02.00-04.00	Water Saving Rice Production Technology for CSA	L & D	Dr. Md. Moshir Rahman, Professor, BAU
04.00-05.00	Group work and presentation	Group work	Dr. Md. Golam Mostofa Sr. Assist. Director NATA

Day –5 Date : 27/09/2018

Time	Topics	Methods	Speaker
09.00-09.15	Recap	-	CC/Participants
09.15-10.15	Mitigation & Adaptation to salinity by crop management technologies for CSA		Dr. Moin us Salam International Consultant, CIMMYT
10.15-11.15	Crop Modeling	L & D	Dr. Moin us Salam International Consultant, CIMMYT
11.15-11.30	Tea Break		
11.30-12.30	Problem soil (drought prone, hill, haor and charland) management for Climate Smart Agriculture	L & D	Dr. UA Naher PSO, Soil Science Division, BRRI, Gazipur.
12.30-01.30	Stress Resistant/Tolerant Rice Crop Varieties to Different Stress Condition	L & D	Dr. Md. Shariful Islam DD (Agronomy), NATA
01:30-02:30	Lunch and prayer		
02:30-03:30	Introduction to Stress Tolerant Crop Varieties Congenial for Climate Smart Agriculture	L & D	Do
03:30-4:30	Awarding & Closing Ceremony	-	DG/Directors/Faculties/Participants

List of Resource Speaker

SL No.	Name	Designation	Organization	e-mail and mobile No.
1	Dr. Md. Abdul Mueeed	Additional Director	DAE,Dhaka Region	muyeedbd61@gmgma.com 01716940311
2	Munshi mohammad Hedayet Ullah	Ex. Director General	NATA	01711-984787
3	Dr. Md. Tariqul Islam	CSO	Plant Breeding Div. BARI, NATA	tariqul1965@gmail.com
4	Dr. Moin us Salam	International Consultant	CIMMYT	01855-871938 moinsalam1@gmail.com
5	Dr. Habib Mohammad Naser	PSO, Soil Science	Soil Science Division, BARI,Gazipur	Nasemh2@yahoo.com 01750446207
6	Dr. Jatish C. Biswas	CSO & Head	Soil Science Division, BRRI, Gazipur	Head.soil@brri.gov.bd 0171533857
7	Dr. Umme Aminun Naher	PSO	Soil Science Division, BRRI,Gazipur	Naher39@gmail.com 01913151914
8	Dr. Md. Moshiur Rahman	Professor	Bangladesh Agricultural University,Mymensingh	Rahmanag63@yahoo.com 01711072561
9	Dr. Md. Sayedur Rahman	Deputy Director (Admin & Support Service)	NATA, Gazipur	sayedur.63@gmail.com 01552495564
10	Dr. Md. Mayen Uddin	Deputy Director (Food Technology)	NATA, Gazipur	Mayen.dae85@yahoo.com 01711969688
11	Md. Zakir Hossain	Deputy Director	NATA, Gazipur	Hzakir104@gmail.com 01715797920
12	Dr. Md. Shariful Islam	Deputy Director	NATA, Gazipur	Mshariful60@yahoo.com 01743051115
13	Dr. Md. Golam Mostofa	Sr. Assist. Director	NATA	kbdmostafa@gmail.com
14	Ashok Kumar Biswas	Monitoring & Evaluation Officer	Enhancement of Crop Production through Farm Mechanization Project - 2 nd phase Khamarbari, Dhaka	

NATA FACULTY MEMBERS

Photo	Name & Designation	Phone/Cell/ E-mail
	Dr. Md. Abu Sayeed Miah Director General (In-charge)	01712-024623 sayeedplp@gmail.com
	Dr. Md. Abu Sayeed Miah Deputy Director (Plant Pathology)	01712-024623 sayeedplp@gmail.com
	Dr. Ataur Rahman Howlader Deputy Director (Soil Science)	02-9263143 01814-301360 ataurdae87@gmail.com
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	Ranjit Kumar Pal Deputy Director (Agril. Machinery & Water Management)	01818-600706 ranjitrkpb@gmail.com
	Md. Mahmud Hasan Deputy Director (Horticulture)	01817-066613 mahamudhassandae@gmail.com
	Md. Jamal Uddin Deputy Director (Entomology)	01718-214607 jamaluddin6257@yahoo.com
	Anowara Akhter Deputy Director (Environment & Agroforestry)	01918-023360 anowaraakhter@yahoo.com

	Mahmudul Hasan Project Director	01715-101818 hasandae@yahoo.com
	Dr. Md. Akhlas Uddin Deputy Director (Planning and Publication)	01716-257354 akhlas.uddin@yahoo.com
	Dr. Md. Mayen Uddin Deputy Director (Food Technology)	01711-969688 mayen.dae85@yahoo.com
	Dr. Md. Sayedur Rahman Deputy Director (Admin & Support Service)	02-49261075 01552-495564 sayedur.63@gmail.com
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	A.K.M. Amdadul Hoque Senior Assistant Director (Horticulture Crop Disease)	01720-364979 amdadhoque74@gmail.com
	Md. Eskandar Hossain Senior Assistant Director (Vegetables & Spices)	01938-615225 eskandarhossain@yahoo.com
	Nilufa Aktar Senior Assistant Director (Food Processing Technology)	01719-174775 nilufaa@yahoo.com

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