Report of the Workshop on "Climate Smart Agriculture Techniques and Projects Sharing Experience by TÜRKİYE" Virtually held on 15 November 2023

1. Introduction

Workshop on "Climate Smart Agriculture Techniques and Projects Sharing Experience by TÜRKİYE", was held on 15 November 2023 virtually. It was hosted by the Ministry of Agriculture and Forestry of the Republic of Turkiye. The High-level experts of relevant authorities of the **People's Republic of Bangladesh, Arab Republic of Egypt, Islamic Republic of Iran, Republic of Indonesia, Malaysia, Federal Republic of Nigeria, Islamic Republic of Pakistan, Republic of Turkiye and D-8 Secretariat attended the meeting. The list of participants as attached as Annex I.**

The Agenda of Workshop is attached as Annex II.

2. Opening Remarks and Statements

Mr. Fuat Kasımcan, Director General for European Union and Foreign Relations, Ministry of Agriculture and Forestry of the Republic of Türkiye, delivered his opening and welcoming remarks at the meeting. The remark is attached as Annex III.

The Secretary-General of D-8, Ambassador Isiaka Abdulqadir Imam, delivered his opening remarks, attached as Annex IV.

3. Concept Note Paper

Climate change is one of the biggest global challenges facing the world today. The agriculture sector is particularly vulnerable to climate change due to its dependence on natural resources such as water, land, and weather conditions. Climate Smart Agriculture (CSA) is an approach that seeks to address the challenges faced by the agriculture sector by promoting sustainable and climate-resilient agricultural practices.

During the workshop, participants highlighted the opportunities, challenges and experiences on CSA in global perspective.

The Concept Note Paper is attached as Annex V.

4. Presentations: Climate Smart Agriculture Techniques and Projects Sharing Experience by Turkiye.

During the workshop, experts from relevant departments of the Ministry of Agriculture and Forestry of the Republic of Turkiye made 9 presentations on Turkiye's best practices and shared their experiences on CSA.

The presentations are attached as Annex VI.

- Applications that support CSA Applications, Department of Information Technologies, Serdar Tevfik Gürbüz
- Introduction of TUCSAP Project, General Directorate for EU and Foreign Relations, Ali Sırrı Ören
- Climate Smart Agriculture (CSA), General Directorate of Agricultural Reform, Necati Cem Aktuz
- Research Studies Concerning Climate Smart Agriculture in Türkiye, General Directorate for Agricultural Research and Policies, Dr. Suat Akgül
- National Water Efficiency Campaign of Türkiye, General Directorate for Water Management, Erdem Eroğlu
- Sectoral Water Allocation Plans, General Directorate for Water Management, Elif Erdem
- Climate Change Impacts On Water Resources And Snowmelt, General Directorate for Water Management, Şükrü Uzun
- Drought Management Plans İn Türkiye, General Directorate For Water Management, Hafize Kaya
- Vertical Farming in Türkiye, Provincial Directorate for Agriculture and Forestry of İstanbul, Hakan Aşan

5. Discussions

CSA is an approach that aims to transform and reorient agricultural systems to support food security and promote sustainable development in the face of climate change. The approach integrates three key pillars:

- Increasing agricultural productivity and incomes
- Adapting and building resilience to climate change
- Reducing and/or removing greenhouse gas emissions, where possible

The High-Level Officials and Experts from the relevant authorities representatives discussed these agenda items and urged Member States to work closely in order to achieve the desired targets.

6. Closing Remarks

The delegates thanked the Ministry of Agriculture and Forestry of the Republic of Turkiye for the excellent organization of the meeting. They also thanked the Moderator **Mrs. Sule Ozge Imamoglu**, Head of International Organizations Department, Ministry of Agriculture and Forestry of the Republic of Turkiye for competent chairing and contribution which lead to fruitful discussion and success of the meeting.

	Full Name	Position	Institution	Country	Email address	Phone
1	Dr. Md. Saifullah	Member Director	Bangladesh Agriculture Research Council (BARC)	Bangladesh		
2	Mr. Md. Mustafizur Rahman	Principal Technical Officer	Bangladesh Agricultural Research Council (BARC)	Bangladesh		
3	Dr. Md. Golam Mahboob	Principal Scientific Officer (Forestry)	Bangladesh Agricultural Research Council (BARC)	Bangladesh	golam.mahboob@gmail.com	+8801816194986
4	Dr. Amal Kemal Eid			Egypt		
5	Dr. Hend Nabil			Egypt		
6	Dr. Dalia Yassin	Director of Research Center, Egypt focal point	Agriculture Economic Research Institute.	Egypt	dalia.yassin@hotmail.com	+20 100 1200189
7	Mohamad Zaeni Tasripin	Expert	Ministry of Agriculture	Indonesia	zaen.mzt@gmail.com	+62817801181
8	Ondy Rakhmat Mulya	Political Officer- Second Secretary	Indonesian Embassy in Ankara	Indonesia	ondy.rakhmat@kemlu.go.id	+905382420185
9	Meidy Rahma Dhana	Vice Consul	CG of the Republic of Indonesia	Indonesia	meidy.rahma@kemlu.go.id	+905310105861
10	Mitra Moazami	Researcher	The Institute of Planning Research Agricultural Economics and Rural Development	Iran	m.moazami@agri-peri.ac.ir	
11	Neda Mohammad Alikhani	Third Secretary, expert for multilateral economic organizations	Ministry of Foreign Affairs	Iran	Alikhani.neda@yahoo.com	
12	Sadegh Ghorbani	Third Secretary, expert for multilateral	Ministry of Foreign Affairs	Iran	Ghorbani.mfair@proton.me	

		economic organizations				
13	Rasool lavaei Adriani	Assistant Professor	Agricultural Strategy Planning & Food Security Research Group	Iran	Lavaeirasool68@gmail.com	
14	Seid Mohammadreza Hajseid Javadi	Researcher	Agricultural & Rural Information Technology & Communication Research Group	Iran	Romzq2018@gmail.com	09198015328
15	Ali Akbar Azimi Dezfuli	Assistant professor	APERDERI	Iran	a.azimi@agri-peri.ac.ir	09124868932
16	Ruwaıda Abdul Wahıd	Senior Research Officer	Malaysian Agricultural Research & Development Institute (MARDI)	Malaysia	ruwaida@mardi.gov.my	09381337307
17	Nur Hıdayah Bıntı Abdullah	Research Officer	Malaysian Agricultural Research & Development Institute (MARDI)	Malaysia	nurhidayahabdullah@mardi.gov.my	+6010-8262551
18	Mohammad Shahid	Senior Research Officer	Malaysian Agricultural Research & Development Institute	Malaysia	shahid@mardi.gov.my	
19	Salako Olumide Tony	Land Resources Officer	Federal Ministry of Agriculture and Food Security	Nigeria	olumide.salako@fmard.gov.ng	08075029031 07062435903
20	Adekoya Daniel Oluwasegun			Nigeria	adekoyaoluwasegun17@gmail.com	
21	Aminu Nasidi Ahmad	Counsellor	Embassy of Nigeria in Türkiye	Nigeria	aminu.nasidi@foreignaffairs.gov.ng	5370513317
22	Mustapha Iyabo	Assistant director	Federal ministry of agriculture and food security	Nigeria	iyabo2020@yahoo.com	+2348032397811
23	Prof. Dr Sultan Habibullah Khan	Director	D8 Center for Agriculture and Food Security, University of Agriculture, Faisalabad, Pakistan	Pakistan	sultan@uaf.edu.pk	+923339917733
24	Syed Riaz Ali Shah	Assistant Chief	Agriculture Plolicy Institute, Islamabad	Pakistan	riazbukhari05@gmail.com	0512221325 03325178115

25	Fawad Seikh	Examiner- Plant Breeders Rights Registry	Ministry of National Food Security And Research	Pakistan	fawadshe1khsst@yahoo.com	+92519260121 +923059321124
26	Farrukh Saleem	Scientific Officer	National Veterinary Laboratories	Pakistan	drfarrukhnvl@gmail.com	+923340110879
27	Kh. Ijaz Ahmed Qureshi	Examiner	Plant breeders rights' registry	Pakistan	qureshiijaz90@gmail.com	+92 3323510729
28	Fuat Kasımcan	Director General for European Union and Foreign Relations	Ministry of Agriculture and Forestry	Türkiye		
29	Sule Ozge Imamoglu	Head of International Organizations Department	Ministry of Agriculture and Forestry	Türkiye	ozge.imamoglu@tarimorman.gov.tr	
30	Erdem Eroğlu	General Diroctorate of Water Management	Department of Research and Assessment	Türkiye	erdem.eroglu@tarimorman.gov.tr	+905068074246
31	Şükrü Uzun	Engineer	Ministry of Agriculture and Forestry - General Directorate of Water Management	Türkiye	sukru.uzun@tarimorman.gov.tr	+903122075935
32	Gulden Yavuz Oncırak	EU Expert	Ministry of Agriculture and Forestry	Türkiye	gulden.yavuz@tarimorman.gov.tr	+90 5066289949
33	Hafize Kaya	Engineer	Ministry of Agriculture and Forestry	Türkiye	hafize.kaya@tarimorman.gov.tr	
34	Necati Cem Aktuz	Working Group Coordinator	Ministry of Agriculture and Forestry	Türkiye	necaticem.aktuz@tarimorman.gov.tr	
35	Elif Erdem	MSc Environmental Engineer	General Directorate of Water management, MoAF	Türkiye	elif.erdem@tarimorman.gov.tr	90312 2076348
36	Ali Sırrı Ören	Project Technical Team Leader	Ministry of Agriculture and Forestry	Türkiye	alisirri.oren@tarimorman.gov.tr	
37	Serdar Tevfik Gürbüz	Business Development Coordinator	General Directorate of Information Technologies	Türkiye	serdartevfik.gurbuz@tarimorman.com.tr	+905332261106

38	Adil Yüksel Perkin	EU Expert	Ministry of Agriculture and Forestry DG EUFR	Türkiye	adil.perkin@tarimorman.gov.tr	
39	Ebru ORKUN	Engineer	Ministry of Agriculture and Forestry	Türkiye	ebru.orkun@tarimorman.gov.tr	
40	Derya Dağdelen Bural	EU Expert	Ministry of Agriculture and Forestry	Türkiye	derya.dagdelen@tarimorman.gov.tr	
41	Hakan ASAN	Agricultural Engineer	Istanbul Indoor Vertical Farming R&D Center	Türkiye	hakan.asan@tarimorman.gov.tr	+905378907084
42	Suat Akgül	Agricultural Engineer	General Directorate of Agricultural Researches and Policies	Türkiye	suat.akgul@tarimorman.gov.tr	0312 3073271 505 2257735
43	Ambassador Isiaka Abdulqadir Imam	Secretary-General of the D-8	D-8 Secretariat	D-8 Secretariat	isiaka.imam@developing8.org	+90 212 3561823
44	Ahmar Ismail	Director for Internal and Legal Affairs	D-8 Secretariat	D-8 Secretariat	ahmar.ismail@developing8.org	+90 212 3561823 +90 537 3201997
45	Punjul Setya Nugraha	Director for Economy, Implementation, and External Relations	D-8 Secretariat	D-8 Secretariat	punjul.nugraha@developing8.org	+90 212 3561823 +90 537 3211997
46	M. Bilal Khan	Executive Assistant	D-8 Secretariat	D-8 Secretariat	bilal.khan@developing8.org	+90 212 3561823 +90 531 5839307

Annex II

AGENDA

"Climate Smart Agriculture Techniques and Projects

Sharing Experience by TÜRKİYE"

15 November 2023, 10.00 – 13.40 (Istanbul time)

Moderator: Mrs. Sule Ozge Imamoglu, Head of International Organizations Department, Ministry of Agriculture and Forestry of the Republic of Turkiye

	Opening Remarks				
10.00-10.30	 Fuat Kasımcan, Director General for European Union and Foreign Relations, Ministry of Agriculture and Forestry, Türkiye 				
	- <i>İsiaka Abdulkadir İmam,</i> Secretary General, D-8 Organization For Economic Cooperation				
10.30-10.45	<i>Applications that support CSA Applications,</i> Department of Information Technologies, Serdar Tevfik Gürbüz				
10.45-11.00	<i>Introduction of TUCSAP Project</i> , General Directorate for EU and Foreign Relations, Ali Sırrı Ören				
11.00-11.15	<i>Climate Smart Agriculture (CSA),</i> General Directorate of Agricultural Reform, Necati Cem Aktuz				
11.15-11.30	Question & answers				
11.30-11.45	Research Studies Concerning Climate Smart Agriculture in Türkiye, General Directorate for Agricultural Research and Policies, Dr. Suat Akgül				
11.45-12.00	<i>National Water Efficiency Campaign of Türkiye,</i> General Directorate for Water Management, Erdem Eroğlu				
12.00-12.15	<i>Sectoral Water Allocation Plans,</i> General Directorate for Water Management, Elif Erdem				
12.15-12.30	Question & answers				
12.30-12.45	<i>Climate Change Impacts On Water Resources And Snowmelt,</i> General Directorate for Water Management, Şükrü Uzun				
12.45-13.00	Drought Management Plans İn Türkiye, General Directorate For Water Management, Hafize Kaya				
13.00-13.15	<i>Vertical Farming in Türkiye,</i> Provincial Directorate for Agriculture and Forestry of İstanbul, Hakan Aşan				
13.15-13.30	Question & answers				
13.30-13.40	<i>Closing Remarks</i> Ministry of Agriculture and Forestry, Türkiye				

Statement by Fuat Kasımcan

Director General for European Union and Foreign Relations, Ministry of Agriculture and Forestry

Esteemed Participants,

I greet you with warmest and sincere regards.

You are welcome to the workshop on "Climate Smart Agriculture Techniques and Projects Experience Sharing by Türkiye".

As Ministry of Agriculture and Forestry, we are very pleased to come together with esteemed representatives of the D-8 countries.

Distinguished Members,

Studies show that in order to achieve the food security of the growing world population, we need to increase food production by 60% in 2050 compared to the current amount.

This requirement means both increased pressure on natural resources in the process of increasing production and more investment in innovation.

For this reason, the need to increase production and efficiency and the need to use environmentally smart sustainable new application techniques more effectively arise.

We are living in the age of digitalization. So, food and agriculture sector should also effectively use the means of technology in every chain of the production.

On the other hand, global food systems are in need of transformation; we shouldn't disregard the importance of innovation.

With this awareness, as the Ministry, we closely follow technological transformations and try to transfer various processes regarding agriculture to digital platforms.

We have declared innovation and digitalization a priority to move towards the future. We carry out all kinds of work to implement a data-based and sustainable systematic approach in our activities.

Esteemed Participants,

For sure, we all have to take the necessary measures in our own countries considering our own specific conditions.

Our colleagues from different departments of the Ministry, will provide you detailed information about the measures taken in Turkiye.

Before concluding my remarks, I would like to underline that sharing information, best practices and experience is essential and this workshop will enable us to discuss ways to enhance our cooperation and solidarity.

I wish all of us a successful workshop.

Thank You....

Statement by Ambassador Isiaka Abdulqadir Imam Secretary-General of The Developing Eight Organization For Economic Cooperation

Distinguished Participants,

Esteemed Colleagues,

Ladies and Gentlemen,

I am happy to address you today at the Workshop on Climate Smart Agriculture (CSA) Techniques and Projects Sharing Experience, organized by the Ministry of Agriculture and Forestry of Türkiye within the framework of the D-8 organization. I thank the host for arranging this important gathering, a mark of our shared commitment to addressing the challenges of climate change through sustainable agriculture practices.

As we all know, climate change has been a pressing issue of our time. Climate change poses significant threats to food security, environmental sustainability, and socio-economic stability. The agricultural sector, being directly dependent on climate conditions, is particularly vulnerable to the impacts of global warming. Therefore, we must explore innovative approaches and exchange experiences to develop climate-smart agriculture techniques to enhance resilience, increase productivity, and mitigate greenhouse gas emissions.

The D-8 organization sees the importance of fostering sustainable agriculture and addressing climate change.

The People's Republic of Bangladesh virtually hosted the 7th D-8 Ministerial Meeting on Agriculture and Food Security from January 12-13, 2022. The Ministerial Meeting focused on the 'Promotion of Climate Smart Agriculture: Key Issues for D-8 Member States.'

The meeting produced a consensus on the pivotal role of collaboration and knowledge-sharing among member countries in making significant strides toward achieving the Sustainable Development Goals (SDGs) and ensuring a sustainable future for future generations.

Distinguished Participants,

Esteemed Colleagues,

Ladies and Gentlemen,

In the D-8 nations, more than 30% of the population relies on agriculture as their primary livelihood. The following statistics serve as evidence of our resilience in the agricultural sector, including:

- i. On average, the agricultural industry contributes 14% to the GDP Of ll D-8 member countries.
- ii. The agricultural industry employs almost **30% of the labor force**.
- iii. D-8 agricultural activity is projected to increase by at least 25% annually.
- iv. D-8 Member States have a **total of 274.25 million hectares** of agricultural land area.
- v. Aggregate value of Agri-Production of the Member States is- \$531.76 billion in 2021.
- vi. Major agricultural products are rice, wheat, potatoes, palm oil, fruit, maize, sugar cane, milk, poultry, eggs, vegetables, onions, jute, rubber, coconuts, bananas, and various types of fruits.

The D-8 established the D8 Research Center for Agriculture and Food Security in Faisalabad, Pakistan, to deepen our cooperation. The Center was officially launched in March this year.

Our leaders mandate the Center to fast-track Research and Development in agriculture to address the pressing challenges facing our countries in food security, agricultural productivity, and sustainable development. Therefore, the Center will be a hub for research and innovation in agriculture, bringing together the expertise and resources of our member countries to develop solutions that promote sustainable agricultural practices and enhance food security.

Distinguished Participants,

Esteemed Colleagues,

Ladies and Gentlemen,

I can advance our Climate Smart Agriculture (CSA) initiatives by leveraging the D-8 Research Center for Agriculture resources in Faisalabad. Numerous measures can be implemented to address this initiative:

- i. **Establish a CSA Task Force:** The D-8 can establish a dedicated task force or working group focused on Climate Smart Agriculture. This group can consist of experts from member countries, including scientists, researchers, policymakers, and agricultural practitioners.
- ii. **Research and Development:** Member States must support the D-8 Research Center for Agriculture in Faisalabad as the center of CSA research and development excellence.
- iii. **Technology Transfer and Capacity Building:** Member States must empower the Center to facilitate the transfer of CSA technologies and practices through training programs, workshops, and knowledge-sharing initiatives to build capacity at the local level.
- iv. **Promote Sustainable Practices**: Member States must direct the Center to advocate for sustainable agricultural practices such as notill farming, agroforestry, crop diversification, and organic farming. These practices can help sequester carbon, conserve water, and improve soil health.

- v. **Policy Recommendations:** Member States must also direct the Center to provide recommendations on CSA principles integration into their agricultural policies and plans.
- vi. **Pilot Projects and Demonstrations:** The Member States must engage with the center to initiate pilot projects on CSA practices.
- vii. **Collaboration with International Organizations:** The center will explore opportunities to collaborate with international organizations and initiatives focused on climate-smart agriculture, such as the Food and Agriculture Organization (FAO), Islamic Organization for Food Security (IOFS), Consultative Group on International Agricultural Research (CGIAR), and other relevant bodies.
- viii. **Monitoring and Evaluation**: through an appropriate mechanism, Member States must monitor and evaluate the impact of CSA interventions. This includes assessing changes in agricultural productivity, resilience, and environmental sustainability.

Distinguished Participants,

Ladies and Gentlemen,

Türkiye has been at the forefront of implementing climate-smart agriculture practices and has achieved notable successes. Their experience and expertise will undoubtedly serve as a valuable resource for all participants in this workshop. Türkiye can inspire and guide other member countries to adopt climate-smart agricultural techniques by sharing their best practices, lessons learned, and success stories.

Therefore, During this workshop, I encourage all participants to engage actively, exchange knowledge, and foster partnerships. Let us capitalize on this opportunity to learn from one another to formulate innovative solutions. We can develop effective strategies that harmonize agriculture, climate action, and sustainable development by leveraging our collective wisdom.

This will require collaboration within the D-8 organization and with international partners, research institutions, and relevant stakeholders. Together, we can create a network of knowledge and innovation that strengthens our collective capacity to address the challenges of climate change.

In conclusion, I want to reiterate my gratitude to Türkiye for organizing this Workshop on Climate Smart Agriculture Techniques and Projects Sharing Experience.

Thank you, and I wish you all fruitful discussions and successful outcomes.

CONCEPT NOTE "Climate Smart Agriculture Techniques and Projects Sharing Experience by TÜRKİYE"

Background:

Climate change is one of the biggest global challenges facing the world today. The agriculture sector is particularly vulnerable to climate change due to its dependence on natural resources such as water, land, and weather conditions. **Climate Smart Agriculture (CSA)** is an approach that seeks to address the challenges faced by the agriculture sector by promoting sustainable and climate-resilient agricultural practices.

Climate Smart Agriculture (CSA) is an approach that aims to transform and reorient agricultural systems to support food security and promote sustainable development in the face of climate change. The approach integrates three key pillars:

- 1. Increasing agricultural productivity and incomes,
- 2. Adapting and building resilience to climate change, and
- 3. Reducing and/or removing greenhouse gas emissions, where possible.

The key principles of CSA include:

Sustainable land management practices that help to conserve and improve soil fertility and reduce soil erosion.

Diversification of crops and livestock, which helps to spread risks and increase resilience to climate variability.

Efficient use of water resources through techniques such as rainwater harvesting, drip irrigation, and other water-saving technologies.

Integration of trees on farms to provide additional ecosystem services, including carbon sequestration, soil conservation, and biodiversity conservation.

The benefits of CSA include:

Improved food security: CSA practices can increase crop yields, improve soil health, and help farmers to adapt to changing climatic conditions, ensuring a consistent food supply.

Increased resilience: CSA practices help farmers to build resilience to climate change by diversifying their production systems and conserving natural resources.

Improved livelihoods: CSA practices can help farmers to increase their incomes by improving productivity and reducing production costs.

Environmental benefits: CSA practices can help to reduce greenhouse gas emissions and conserve natural resources such as water and soil.

Climate Smart Agriculture is an important approach for addressing the challenges faced by the agriculture sector due to climate change. By promoting sustainable and climate-resilient agricultural practices, CSA can help to ensure food security, increase resilience, improve livelihoods, and conserve natural resources.

- Link of the workshop will be announced to the participants.
- The meeting language is English and there will be no translation.
- For any further information please contact:

Şule KARAKOÇ – Interpreter – <u>sule.karakoc@tarimorman.gov.tr</u> Gülden YAVUZ ÖNÇIRAK – EU Expert – <u>gulden.yavuz@tarimorman.gov.tr</u>

All participants are kindly invited to fill and send the below table via e-mail not later than 6 November 2023.

Name	Surname	Title	Organization/Institute	Country	E- mail	Telephone