

ANNUAL REPORT 2023



SAARC Agriculture Centre

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SAC Annual Report 2023



SAARC Agriculture Centre

BARC Complex, Farmgate
Dhaka, Bangladesh
www.sac.org.bd



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SAC Annual Report 2023

Published by

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Citation

SAC 2024. Annual Report 2023. SAARC Agriculture Centre, Dhaka, Bangladesh.

Printed by:

College gate Binding & Printing

1/7, college gate, Mohammadpur, Dhaka-1207

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Abbreviations

APAARI	Asia-Pacific Association of Agricultural Research Institutions
APRAC	Asia Pacific Right to Food System Conference
AV	Audio Visual
AFA	Asian Farmers Association for Sustainable Rural Development
BAEN	Bangladesh Agricultural Extension Network
BARC	Bangladesh Agricultural Research Council
BARI	Bangladesh Agricultural Research Institute
BAU	Bangladesh Agricultural University
BRRRI	Bangladesh Rice Research Institute
BoBP-IGO	Bay of Bengal Programme-Inter-Governmental Organization
CGIAR	Consultative Group on International Agricultural Research
CIMMYT	International Maize and Wheat Improvement Centre
CIRDAP	Centre for Integrated Rural Development for Asia Pacific
C-SUCSeS	Consortium for Scaling-Up Climate Smart Agriculture in South Asia
COP	Community of Practice
CSA	Climate Smart Agriculture
CVOs	Chief Veterinary Officers
DAE	Department of Agricultural Extension
DAM	Department of Agricultural Marketing
FAO	Food and Agriculture Organization of the United Nations
FSAB	Food Safety Authority of Bangladesh
GB	Governing Board
HORDI	Horticultural Research and Development Institute
ICAR	Indian Council for Agricultural Research
ICARDA	International Centre for Agricultural Research in Dry Areas
ICIMOD	International Centre for Integrated Mountain Development
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT	Information and Communication Technology
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
ILRI	International Livestock Research Institute
IRRI	International Rice Research Institute
ISARC	IRRI South Asia Regional Centre
MOA	Ministry of Agriculture
NARC	Nepal Agricultural Research Council
NARS	National Agricultural Research System
NGO	Non-Government Organization

NRM	Natural Resources Management
PARC	Pakistan Agricultural Research Council
PSC	Project Steering Committee
SAARC	South Asian Association for Regional Cooperation
SAC	SAARC Agriculture Centre
SACRP	South Asia and China Regional Programme
SDF	SAARC Development Fund
SDG	Sustainable Development Goal
SJA	SAARC Journal of Agriculture
TADs	Transboundary Animal Diseases
TAP	Tropical Agriculture Platform's
TCARD	Technical Committee on Agriculture and Rural Development
ToT	Training of Trainers
UN	United Nations



Message from the Director



South Asia is the home of more than 2.0 billion population and land mass of this area is 6.4 million square kilometres. Burgeoning population, decreasing land holdings and changing climatic conditions are the main issues of this region. Although this region has made a significant progress in the agriculture sector, but to fulfill the future demand of food, more per acre yield of all crops will be needed, along with the adoption of climate friendly and financially affordable technologies. There will be a need to bring the educated people and similarly the women in the agriculture sector. Latest technologies which have been tested for water saving and similarly latest fertilizers application methods and as well as different kind of available fertilizers will be needed to be used on

large scale. NARS systems of all SAARC Member States will have to develop new high yielding, disease resistant varieties of all crops on large scale for the different areas of the country. Agriculture Extension Departments of all the countries of SAARC will have to reach the farming community by using the latest technologies to minimize the yield gaps of all crops. Similarly the agriculture marketing system needs changes, so that farmers should get maximum price of their produce. Yield losses due to the different environmental, diseases and insects / pests need to be minimized drastically. Similarly post harvest losses are still a large in the SAARC Member States, more emphasis is needed to reduce these losses, so that prices of all agriculture commodities should become in the reach of all people of this region and no person should go to bed without food. Micronutrients including zinc, iron etc deficiency is a common cause of stunting growth of childrens, poor health of women and men, so there is urgent need of development and dissemination of biofortified varieties of different crops in the all SAARC Member States. Similarly there is need of revolutionize the livestock, poultry and fish sectors of this region on the modern basis

SAARC Agriculture Centre (SAC) is working closely with the governments of SAARC member states and other collaborating partners, and it will continue to address issues and harness opportunities in agriculture and allied sectors by providing policy priorities, supporting and strengthening regional capacities, communicating effective technologies and evidence - based analysis to policymakers, and other stakeholders in this region of the world.

SAARC Agriculture Centre (SAC) has been implementing the SAARC Development Fund (SDF) supported project entitled “Livelihood enhancement of small farmers in SAARC region through small agro-business focusing value chain development” in SAARC Countries. Besides, one IFAD and SDF funded project entitled “Consortium for Scaling-Up Climate Smart Agriculture in South Asia” (C-SUCSeS) is also being implemented among the SAARC Member States. The report presents some of the ongoing initiatives and achievements of these projects of the year 2023. SAARC Agriculture PhD Scholarship Programme is in progress.

In the end, I wish to convey my sincere thanks to all the focal experts of the SAARC Member States, collaborating partners, and other regional stakeholders for their continuous support to us in our efforts to make this regional centre vibrant. I wish to express my gratitude to the SAARC Secretariat, Governing Board Members, and TCARD Members for their constant support and guidance.

Thank you.

Long Live, Spirit of SAARC

(Dr. Md. Harunur Rashid)

About the SAARC Agriculture Centre (SAC)

The South Asian Association for Regional Cooperation (SAARC) was established on the 8th of December 1985 in Dhaka by the Heads of the founding member states, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Afghanistan was introduced as the 8th member state of the Association during the 14th SAARC Summit held in New Delhi, India in April 2007.

SAARC Agriculture Centre (renamed in April 2007 from SAARC Agricultural Information Centre, SAIC) is the first regional Centre established by the SAARC in 1988, primarily for information management in the field of agriculture and allied disciplines.

With the passage of time, the Centre braced up broader challenges to make regional cooperation more responsive to the changing needs of the farming communities and relevant stakeholders. SAARC Agriculture Centre has now been given an enhanced mandate for supporting the Member States to address common regional challenges of the food and agriculture sector by strengthening agricultural research and extension systems, knowledge management, and appropriate agricultural policies and programme development.

The Centre's headquarter is in the BARC Complex, Farmgate, Dhaka. The Centre is headed by the Director, accompanied by competent Professionals and the General Service Staffs (GSS). Director of the Centre is deputed by the Government of the host country, i.e., Bangladesh while Professional Staffs are recruited from the regional competition among the applicants from the SAARC member states. There are six professional staffs, Senior Programme Specialists (SPSs)- in the Centre to lead different themes of agriculture and allied sectors such as crops, horticulture, livestock, fisheries, natural resources management (NRM) and policies and programmes.

Professional staffs are responsible for programme development, planning and execution in their respective themes with the support from GSS. All programmes of the centre are being developed, fine-tuned, and executed through overall supervision, guidance, and leadership of the Director. The GSS including the senior technical officer, senior programme officer, administrative and account officers, drivers, and other supporting staffs are recruited from the host country. The Centre's programme and institutional costs are borne from the member states contribution. The Government of the People's Republic of Bangladesh provisions the office space as well as required capital costs for the Centre.

Currently, there are two types of programmes undertakings of the Centre- regular programmes and the need-based programmes. The regular programmes include publications-SAARC AgriNews – quarterly news letter, SAARC Journal of Agriculture (biannual), SAARC PhD Scholarship Programme, SAARC Charter Day observance, distribution of information materials, promotional activities etc.

The need-based programmes generally address the regional issues and are developed through the consultative process with the relevant authorities and other stakeholders of the member states. The SAARC Technical Committee on Agriculture and Rural Development (TCARD) provides broad guidelines of programme development on regional issues. The consultative process for the programme development involves participation of stakeholders at country levels as well as synthesis and vetting at the expert's level. The programme proposals thus developed are then reviewed in the SAC Governing Board (GB) meeting.

Both the regular and need-based programmes proposals are reviewed, revised, and recommended by the Governing Board for further action to the SAARC Programming Committee (PC). The SAARC Programming Committee again reviews the programmes and forwards to the Standing Committee for final approval. The Council of Ministers of the Member States gives concurrence to the programmes prior to the convening of the SAARC Summit.

Executive summary of 2023 programmes

SAARC Agriculture Centre has three different types of programmes - regular programmes, need-based programmes, and the time-bound externally funded development projects. The report mainly highlights the key activities, and achievements with respect to these programmes undertaken during 2023.

Regular programmes primarily include publications (books, journal, policy briefs etc), and knowledge management functions, SAARC Agriculture PhD programme, and institutional representation in various forums. To disseminate the information on appropriate and proven agricultural technologies, SAC is collating several publications and audio-visual materials for wider distribution in the South Asian region for the benefit of agricultural researchers, academician, students, and policy makers.

Publication of relevant books and Policy Briefs, the SAARC Journal of Agriculture (half-yearly), SAARC AGRINEWS (Quarterly), and production as well as establishment of the interactive online platform are important means to disseminate useful information. The Centre published one edited book besides the routine publication of the SAARC Journal of Agriculture and SAARC AGRINEWS during 2023.

SAC has established an online platform, freely accessible for everyone to hundreds of publications and audio-visual resources on proven technologies and adequate policy interventions for the sustainable development of the agri-food systems in the region.

Centre continued to support scholars selected under the SAARC Agriculture PhD Scholarship Programme as well as observed the SAARC Charter Day, and maintained linkages and held collaborative meetings with different agencies including IRRI, Welthungerhilfe, FAO and ICIMOD etc working in the field of agricultural research and development in the reporting year.

Common challenges being faced by SAARC Member States in agri-food systems are translated into the Centre's need-based programmes which are undertaken in six distinct thematic areas- crops, horticulture, livestock, fisheries, natural resources management, and policy development led by respective Senior Programmes Specialists (SPSs) of the SAC.

Centre always makes an endeavour to chalk out the need-based programmes having broader perspectives after due consideration of the real needs of the farmers and the emerging global and regional issues i.e. climate change, disaster risks, resources degradation, and feminization of agriculture, vis a vis associated impacts in South Asian agri-food systems. These programmes are thus formulated in close consultation with the relevant experts from the region and executed involving all stakeholders including agricultural scientists, technologists, researchers, professionals, academia, extension workers and policy makers from the SAARC member states.

In nutshell, following were the key activities of the Centre during 2023

- SAC G.B meeting was conducted to review the previous work and to approve the workplan of the year 2024.
- Continuation of SAARC Agriculture PhD Scholarship Programme.
- Observance of 39th SAARC Charter Day at SAARC Agriculture Centre Dhaka.
- Strengthening partnership & collaboration with different regional and international organizations.
- Publication of SAARC Journal of Agriculture and the newsletter- AGRINEWS.
- Publication of edited books on different challenges of South Asian agriculture & allied sectors.
- Organizing visits of the various dignitaries at the Centre and the SAC's project sites in Bangladesh and other SAARC countries.
- Execution of projects supported by SDF and IFAD.

SAC Programmes & Activities in 2023

Regular Programmes



1. Information Management and Networking

A. Publications

SAARC Agriculture Centre (SAC) is regularly publishing SAARC AGRINEWS (Quarterly), SAARC Journal of Agriculture (Biannual), policy briefs, and books and manuals on emerging issues of food and agriculture system.

SAARC AGRINEWS



The quarterly SAARC AGRINEWS published from the Centre highlights the accomplished activity during the specific quarter of the year and is widely circulated among the stakeholders of the SAARC Member States including the Governing Board Members. In 2023, four issues of SAARC AGRINEWS were published highlighting the participation of SAC in the Omor Ekushe-Book fair, participation of SAC scientists in the different events i.e Conference of Bangladesh Agricultural Extension Network (BAEN), participation in the Participatory Rural Development initiatives Society (PRDIS), India and similarly in the program of Food Safety Authority of Bangladesh (FSAB) and about the visits of officers of the different organizations i.e APARARI, IRRI, SACRP and ICARDA, World Bank team Dhaka and Bay of Bengal Programme –Inter- Governmental Organization (BoBP-IGO, based in Indian to SAC in Issue-I (January– March 2023).

Issue-II (April – June 2023), covered different activities of C-SUCSeS Project and Livelihood Enhancement Project and similarly participation of SAC scientists in different events i.e. participation in the 90th Annual general session of the World Assembly of Delegates of the world organization for animal health (WOAH) Paris France and Progress sharing meeting of SAARC Agriculture PhD program. It also covered the visit of His Excellency Esla Ruwan Weerakoon, Secretary General SAARC to SAARC Agriculture Centre Dhaka and it also covered the visits of Agriculture and Finance consultants Germany and SSIL Bangladesh to SAC.

Issue-III (July 1 – September 2023), covered different activities of C-SUCSeS Project and Livelihood Enhancement Project and similarly visit of SAC team to National Breeding Farm at Bagerhat, Bangladesh. Consultation meeting of SAC and WeltHungerhilfe (WHH) on advancing nutrition security in Kathmandu Nepal. Participation of SAC scientists in the Asia-pacific Quadripartite One Health workshop, Thailand and similarly in the 8th Standing Group Expert-African Swine Flu for Asia and the Pacific in Qingdao, China.

Issue-IV (October – December 2023), covered different activities of C-SUCSeS Project and Livelihood Enhancement Project and celebration of 39th SAARC Charter Day by the SAC. All these SAARC AGRINEWS are available online at SAC webpage.

SAARC Journal of Agriculture



Publication of SAARC Journal of Agriculture (SJA) is one of the important regular activities of SAARC Agriculture Centre. Two issues of SJA are published each year.

The SJA publishes the peer-reviewed original articles based on empirical assessments, field surveys, reviews, and case studies, on the fundamental, applied and management related aspects of crop science, horticulture, animal science, fisheries, natural resource management, post-harvest processing, rural development, climate change, etc. The aim of SJA is to advance and disseminate the knowledge in all spheres of food and agriculture systems towards achieving the sustainable development goals. During 2023, 2 issues of SAC were published.

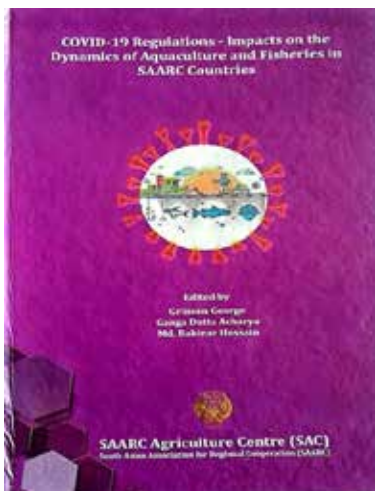


SAARC Annual Report 2022

SAC regularly publishes the Annual Report covering all the activities carried out by the Centre. SAC published its Annual Report of the year 2022.

Books

COVID-19 Regulations-Impacts on the Dynamics of Aquaculture and Fisheries in SAARC Countries



The book entitled “COVID-19 Regulations-Impacts on the Dynamics of Aquaculture and Fisheries in SAARC Countries” This book has been published by SAARC Agriculture Centre (SAC) Dhaka Bangladesh. This book has been edited by Dr Grinson George, Dr Ganga Dutta Acharya and Dr Md. Baktar Hossain. This book addresses the impacts of COVID-19 pandemic on the dynamics of aquaculture and fisheries in SAARC countries. The COVID-19 has left an indelible mark on societies worldwide, affecting diverse sectors, including also fisheries and aquaculture industry, where indirect consequences such as changes in consumer demand, disruptions in market, accessibility, transportation challenges, and border restrictions etc had created significant challenges. This study delves into multifaceted repercussions of the pandemic on the aquatic food sector and small – scale fisheries across various South Asian countries with a particular focus on India, Bangladesh, Bhutan, Nepal and Pakistan.

This book can be freely accessed at SAC website, section: resources and subsection: publication.

B. Library and Digital Repositories

SAARC Agriculture Centre has been a hub for “Agricultural Knowledge & Information Sharing in South Asia”. The Centre has a well-maintained library inside the office premise. Groups and individuals seeking information on regional issues of agricultural research and development may visit SAC library and look for the immense sources of information including books, journals, reports, manuals, and many more resources collected and maintained therein. All publications of the Centre including books, training manuals, SAARC Journal of Agriculture, policy brief, SAARC AGRINEWS are being hosted on the Centre’s website: www.sac.org.bd and are freely available to the users.

The Centre’s website is also an interactive platform with dynamic features and programmes for sharing the latest activities of SAARC Agriculture Centre. Additionally, it displays the information pertaining to technological advancement and key issues in crops, horticulture, natural resources, livestock, and fishery sectors of South Asia. Regional policies on emerging challenges such as climate change adaptation and mitigation, agricultural research and development, gender and agriculture, transformation of rural economy, regional trade etc are also the issues included in this platform.

Publication materials added to the library during 2023

Sl. No.	Books (Purchased)
1.	Project Management by Krishibid Shah Md. Akramul Hoque, 377, Iqbal Road, West Shewrapara, Mirpur, Dhaka – 1216, June 2023.
2.	Regional Expert Consultation on Agroforestry for Environmental Resilience and Sustainable Livelihoods of Farmers in Asia-Pacific (AFERSuLiF-AP); Proceedings and Recommendations by Asia – pacific Association of Agricultural Research Institutions (APAARI), 182 Iarn Luang Road, Bangkok 10100, Thailand, April 2023.
3.	Bangladesh Agricultural Research Vision 2041 (Pub. No. 14) by Bangladesh Agricultural Research Council, New Airport Road, Farmgate, Dhaka – 1215, February 2023.
4.	Fisheries Research in Bangladesh; Needs and Priorities (Pub no. 21) by M H Rashid...et al, Project Implementation Unit, NATP, Phase 11 Project (NATP-2) BARC, Farmgate, Dhaka-1215, May 2023.
5.	Annual Report 2021 – 2022 by Dr. Md. Abdul Malek...et all, Bangladesh Institute of Nuclear Agriculture, BAU Campus, Mymensingh-2202, July Bangladesh.
6.	Aspirational Momentum: The Development Story of Bangladesh by Tawfiq-e-Elahi Chowdhury and Mahir A. Rahman (Research Report - 196), Bangladesh Institute of Development Studies (BIDS), Agargaon, Sher-e-Bangla Nagar, Dhaka – 1207, October 2023.
7.	Agglomeration and Resilience: Impact of COVID-19 on Clustered and Non-Clustered SMEs in Bangladesh (Research Report - 197) by Kazi Iqbal...et all, Bangladesh Institute of Development Studies (BIDS), Agargaon, Sher-e-Bangla Nagar, Dhaka – 1207, November 2023.
8.	Research Priorities in Bangladesh Agriculture Pub. No. (19) by Project Implementation Unit (PIU)-BARC, NATP Program Phase 11 Project (NATP -2), BARC, Farmgate, Dhaka-1215, May 2023.
9.	SAARC Journal of Agriculture, Vol. 21(1) June 2023 by SAARC Agriculture Centre, BARC Complex, Farmgate, Dhaka – 1215.
10.	Recommendations to Strengthen Seed Sector Policies and Systems of Bangladesh by The Honorable Minister of Agriculture, Government of Bangladesh, February, 2023.
11.	Achievement of NATP-2: Research Component (Pub. No. 23) by Project Implementation Unit, NATP, Phase 11 Project (NATP-2) BARC, Farmgate, Dhaka-1215, May 2023.
12.	Amra K? Dormiyo Bohuttobad O Bangla r Sanskritik Boicitro (BIDS public Lecture: New Series No. 07) by Abdul Momin Chowdry, Bangladesh Institute of Development Studies (BIDS), Agargaon, Sher-e-Bangla Nagar, Dhaka – 1207, August 2023.
13.	Vasha Andolon Teke Muktijudho: Purbo Bongey Modho Bitter Bikash (BIDS public Lecture: New Series No. 08) by Atiur Rahman, Bangladesh Institute of Development Studies (BIDS), Agargaon, Sher-e-Bangla Nagar, Dhaka – 1207, October 2023.
14.	Amartya Sen: The Lion Who Defies Winter; A Personal Tribute on the occasion of his 90th birthday (BIDS public Lecture: New Series No. 09) by Nazrul Islam, by Atiur Rahman, Bangladesh Institute of Development Studies (BIDS), Agargaon, Sher-e-Bangla Nagar, Dhaka – 1207, November 2023.
15.	Bangladesh Agricultural Research Vision 2041 Pub. No. (14) by Project Implementation Unit (PIU)-BARC, NATP Program Phase 11 Project (NATP -2), BARC, Farmgate, Dhaka-1215, February 2023.
16.	Bangladesh Livestock Research Priorities (Pub. No. 20) by Project Implementation Unit (PIU)-BARC, NATP Program Phase 11 Project (NATP -2), BARC, Farmgate, Dhaka-1215, May 2023.
17.	Unnoyon Agro Jatrai Krishi 2009-2023 by Ministry of Agriculture, Dhaka, October 2023.
18.	Global Hunger Index; Food Systems Transformation and Local Governance by International Food Policy Research institute, Ireland, October 2022.
19.	COVID-19 Regulations – Impacts on the Dynamics of Aquaculture and Fisheries in SAARC Countries , editors by Grinson George, Ganga Dutta Acharya and Md. Baktar Hossain, SAARC Agriculture Centre; South Asian Association for Regional Cooperation (SAARC) BARC

Sl. No.	Books (Purchased)
	Complex, Farmgate, Dhaka – 1215, December 2023.
20.	Annual Report 2022 , Edited by Dr. Sikander Khan Tanveer...et al., SAARC Agriculture Centre, BARC Complex, Farmgate, Dhaka – 1215, September 2023.
21.	Climate – Smart Agriculture Technologies and Practices in Bangladesh; Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCCeS) Project (IFAD Grant No. 2000001968) by Apurbo Kumar Chaki, Kinzang Gyeltshen, ...et al, SAARC Agriculture Centre, Dhaka, September 2023.
22.	Climate – Smart Agriculture Technologies and Practices in Bhutan; Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCCeS) Project (IFAD Grant No. 2000001968) by Rinchen Wangmo, Kinzang Gyeltshen, ...et al, SAARC Agriculture Centre, Dhaka, October 2023.
23.	Climate – Smart Agriculture Technologies and Practices in India; Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCCeS) Project (IFAD Grant No. 2000001968) by V. K. Singh, Kinzang Gyeltshen, ...et al, SAARC Agriculture Centre, Dhaka, September 2023.
24.	Climate – Smart Agriculture Technologies and Practices in Nepal; Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCCeS) Project (IFAD Grant No. 2000001968) by Tika Ram Chapagain, Kinzang Gyeltshen, ...et al, SAARC Agriculture Centre, Dhaka, October 2023.
25.	Climate – Smart Agriculture Technologies and Practices in Pakistan; Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCCeS) Project (IFAD Grant No. 2000001968) by I Hussain, Kinzang Gyeltshen, Md. Baktear Hossain...et al, SAARC Agriculture Centre, Dhaka, October 2023.
26.	Climate – Smart Agriculture Technologies and Practices in Sri Lanka; Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCCeS) Project (IFAD Grant No. 2000001968) by H. K. Kadupitiya, Kinzang Gyeltshen, ...et al, SAARC Agriculture Centre, Dhaka, September 2023.
27.	SAARC Journal of Agriculture, Vol. 21(1) June 2023 by SAARC Agriculture Centre, BARC Complex, Farmgate, Dhaka – 1215.

Publications available in SAC online repository

Sl. No.	Title of the Publications
01.	Released and Registered Crop Varieties of Cereals, Pulses and Oilseeds in SAARC Region.
02.	Cotton Technology Exchange Programme in SAARC Region.
03.	Policy Farming on Fish Biodiversity Management in Transboundary Rivers of South Asia.
04.	Climate Change Impact on Coastal Fisheries and Aquaculture in South Asia.
05.	Pulses for Sustainable Food and Nutrition Security in SAARC Region.
06.	Role of Agro-processing for Rural Development in SAARC Region.
07.	Status and Future Prospect of Organic Agriculture for Safe Food Security in SAARC Member Countries.
08.	Soil and Soul – Means and End for Sustainable Agriculture.
09.	SAARC Outlook on Water-Energy-Food Nexus in SAARC Member Countries.
10.	Technological Advancement – Agro-forestry Systems – Strategy for Climate Smart Agricultural Technologies in SAARC Region.
11.	Sericulture Scenario in SAARC Region.
12.	Potential and Prospect of Floriculture Sector to Improve Livelihood of the Farmers in SAARC Member Countries.
13.	SAARC Dairy Out Look.

Sl. No.	Title of the Publications
14.	Means and End for Sustainable Agriculture-A collection of essays and seminar papers on Soil.
15.	Mite Management of Coconut in SAARC Member Countries.
16.	Adaptation to Climate Change Impact on Crop Production in SAARC Member Countries.
17.	Prospects, Needs Benefits and Risk Assessment of Agriculture Related Genetically Modified Products in SAARC Member Countries.
18.	Farm Animal Genetic Resources in SAARC Member Countries Diversity, Conservation and Management.
19.	Value Chain Analysis and Market Studies on Fruits and Vegetable in SAARC Member Countries.
20.	National Agricultural Extension Systems (NARES) in SAARC Member Countries - An Analysis of the System Diversity.
21.	SAC Monograph on The SAARC Australia Project entitled “Developing Capacity in Cropping Systems Modelling for South Asia”.
22.	Coastal and Marine Fisheries Management in SAARC Member Countries.
23.	Popularizing Multiple Cropping Innovation as a means to Raise Crop Productivity and Farm Income.
24.	Extent and Potential use of Bio-pesticides for Crop Production in SAARC Member Countries.
25.	Best Practices and Procedures of Saline Soil Reclamation Systems in SAARC Member Countries.
26.	National Agricultural Education System in SAARC Member Countries.
27.	Economic Impact of Transboundary Animal Diseases in SAARC Member Countries.
28.	Diversity of Veterinary Services in SAARC Member Countries.
29.	Quality Seed in SAARC Member Countries: Production, Processing, Legal and quality Control and Marketing System (Reprint).
30.	SAARC Seed Outlook.
31.	Current Status and Future Prospect of Pulse Production in SAARC Member Countries.
32.	Directory of Successful Farm Machinery in SAARC Member Countries.
33.	Statistical Data Book for Agricultural Research and Development in SAARC Member Countries 2012.
34.	Impact of Climatic Parameters on Agricultural Production and Crop Productivity Losses through Weather Forecast and Advisory Service in SAARC Member Countries.
35.	Enhancing Oilseeds Production through Improved Technology in SAARC Member Countries.
36.	NARS (National Agricultural Research System) in SAARC Member Countries-An analysis of System Diversity.
37.	Pesticide Information of SAARC Member Countries.
38.	Veterinary Public Health and Zoonotic Disease Control in SAARC Member Countries (Workshop Proceedings).
39.	Dairy Production, Quality Control and Marketing System in SAARC Member Countries (Workshop Proceedings).
40.	Strategies for Arresting Land Degradation in South Asian Countries.
41.	Quality Seed in SAARC Member Countries: Production, Processing, Legal and Quality Control and Marketing System (Workshop Proceedings).
42.	Public Sector Support System and its collaboration with Private Sector for Livestock Development in SAARC Member Countries.
43.	Statistical Data Book for Agricultural Research and Development in SAARC Member Countries (2008-09).
44.	Proceedings of Regional Workshop on Hill Agriculture in SAARC Member Countries: Constraints & Opportunities.
45.	Directory of Ph.D. Dissertations on Agriculture in SAARC Member Countries 2000-2006 Vol. 3, India.
46.	Fodder Germplasm in SAARC Member Countries.
47.	Status of Integrated Pest Management (IPM) in SAARC Member Countries.

Sl. No.	Title of the Publications
48.	Regional Workshop on Farm Mechanization for Small holders Agriculture in SAARC Member Countries.
49.	Directory of PhD Dissertations on Agriculture in SAARC Member Countries 2000-2006 Vol.2, India.
50.	Bibliography of Periodicals Available in SAARC Agriculture Centre Library (2 nd Edition).
51.	Livelihood Development through Agriculture in the Saline Prone Coastal Ecosystem of SAARC Member Countries.
52.	Best Practices in Animal Feed Production and Management in SAARC Member Countries.
53.	Statistics Data Book for Agricultural Research and Development in SAARC Member Countries.
54.	Crop Varieties in SAARC Member Countries.
55.	Regional Programme Development in Agriculture Through Consultations.
56.	Handbook on Livestock and Poultry Diseases in SAARC Member Countries.
57.	Training Manual and Interactive Multimedia CD ROMs on Presentation Technology.
58.	Catalogue on Natural Enemies of the Insect Pests Food Crops in SAARC Member Countries.
59.	Directory of PhD Dissertations on Agriculture in SAARC Member Countries 2000-06 Vol. 1, Bangladesh.
60.	Bibliography of Periodicals Available in SAARC Agriculture Centre Library.
61.	Proceedings of the Regional workshop on Research-Extension Linkages for Effective Delivery of Agricultural Technology in SAARC Member Countries.
62.	Guide on Medicinal and Aromatic Plants of SAAC Member Countries.
63.	Risk in Agriculture and their Coping Strategies in SAARC Member Countries.
64.	Handbook on Fish and Crustacean Diseases in the SAARC Region.
65.	Agricultural Scientists and Technologists of SAARC Countries: 2nd Edition.
66.	Statistical Bulletin of SAARC Agricultural Data-2004.
67.	Proceedings of the Regional Workshop on Attempts and Successes of ICT Roadmap to Villages in the SAARC Member Countries.
68.	Technologies on Livestock and Fisheries for Poverty Alleviation in SAARC Member Countries.
69.	Agricultural Institutions in SAARC Countries: 3rd Edition.
70.	Statistical Bulletin of SAARC Agricultural Data-2003.
71.	Plant Genetic Resources of SAARC Member Countries: Their Conservation and Management.
72.	Proceedings of SAARC Workshop on Post harvest Technology.
73.	Role of Information and Communication Technologies for Poverty Alleviation through Agricultural Development in SAARC Member Countries.
74.	SAARC Directory of Seed Companies / Entrepreneurs 2003.
75.	Statistical Bulletin of SAARC Agricultural Data –2002.
76.	Proceedings of SAARC Workshop on Soil Fertility Management for Increasing Productivity in Rice-based Cropping System.
77.	Annotated Bibliography on Seed Quality, Production and Preservation in the SAARC Region.
78.	Agricultural Research and Extension Systems in SAARC Member Countries.
79.	Quarantine and Phytosanitary Laws of SAARC Member Countries.
80.	Directory of Agricultural Periodicals of SAARC Member Countries (3rd edition).
81.	Development of Horticulture in SAARC Member Countries.
82.	Regional Workshop of Experts in SAARC Member Countries on Transfer of Technology in Agriculture.
83.	Agricultural Information Systems and Services in SAARC Member Countries.
84.	Union Catalogue of Ph.D. Thesis of SAARC Member Countries.
85.	Agricultural Training in SAARC Member Countries.
86.	Agricultural Information Needs, Mode, Mechanism and Information Flow in SAARC Member Countries.

Sl. No.	Title of the Publications
87.	Bibliography on Technologies for Drought-prone and Salt-affected AEZ in SAARC Member Countries.
88.	Success Stories on Transfer of Farm Technology in SAARC Member Countries.
89.	Hybrid and High Yielding Crop Varieties in SAARC Member Countries.
90.	Innovative Agricultural Technologies in SAARC Member Countries.
91.	Agricultural Institutions in SAARC Member Countries: 2nd Edition.
92.	Database on Renewable Energy Resources in SAARC Member Countries (1996).
93.	Directory of Agricultural Periodicals of SAARC Member Countries: 2nd Revised Edition.
94.	Database on Livestock Production Breeding and Management in SAARC Member Countries.
95.	Improved Equipment for the Farm People of the SAARC Region.
96.	Annotated Bibliography on Potato in the SAARC Member Countries.
97.	Bibliography on Fish Diseases in the SAARC Member Countries.
98.	Dynamics of Agricultural Biotechnology: SAARC Bibliographical Database.
99.	Postharvest Management in Agriculture SAARC Bibliographical Database.
100.	Agricultural Scientists and Technologists of SAARC Member Countries: 1st Edition.
101.	Agricultural Institutions in SAARC Member Countries: 1 st Edition.
102.	Annotated Bibliography on Agroforestry in the SAARC Region.
103.	Directory of Agricultural Periodicals of SAARC Member Countries (1st edition).
104.	Women in Agriculture, Gender issues in South Asian Farming.
105.	Agricultural Research in SAARC Region: Common challenges and priorities.
106.	Mechanization for Sustainable Agricultural Intensification in SAARC Region.
107.	Community-based Non-Wood Forest Products Enterprise: A Sustainable Business Model.
108.	Pulse Based Recipes for Better Diets and Nutrition.
109.	Backyard Poultry Production System in SAARC Member Countries.
110.	Sustainable Goat Farming for Livelihood Improvement in South Asia.
111.	Water-Energy-Food Nexus: A basis for Sustainable Agricultural Development in SAARC Region.
112.	Best Practices of Integrated Plant Nutrition System in SAARC Member Countries.
113.	Best Practices of Conservation Agriculture in South Asia.
114.	Best Practices of Maize Production Technology in South Asia.
115.	Challenges and opportunities in Value Chain of Spices in South Asia.
116.	Best Management Practices in Aquaculture; Capacity Building and Policy Development.
117.	Export Promotion and Global Market Access for Agricultural and Food Products.
118.	Farm –made Aqua feeds: Opportunities, Challenges and policy intervention.
119.	Monograph of Threatened Fish of South Asia.
120.	Facilitating Microbial Pesticide Use in Agriculture.
121.	Agricultural Risk Management for Small Farmers in South Asia.
122.	Exchange of rice-based value chain development technologies in SAARC Member Countries.
123.	Development of country specific Good Agriculture Practices (GAP) standards and harmonization of SAARC GAP for vegetable and fruits in SAARC Member Countries.
124.	Animal genomics selection for the genetic improvement and enhancing productivity of indigenous livestock.
125.	Development of sustainable rural poultry value chain model for poverty reduction.
126.	Small sale fisheries in South Asia.
127.	Trans-boundary fish diseases in the SAARC region: threats, their therapeutic and prophylactic measures and policy briefing.
128.	Information and communication technologies (ICTs) for development of rural agriculture in South Asia: Issues, challenges, opportunities and policy concerns.
129.	Women’s empowerment for agriculture development in South Asia: enabling policies.

Sl. No.	Title of the Publications
130.	Climate smart agricultural policies, strategies and agricultural development programmes towards climate change adaptation and mitigation.
131.	Agricultural Technologies in South Asia “Formulation of Enabling Policy Recommendations and Project Concept”.

B. Bibliographical Information Services (ABIS)

SAARC Agriculture Centre (SAC) has been providing Agricultural Bibliographic Information Service (ABIS) on different CD-ROM database. The following CD-ROM databases are available with SAC: CROP CD (2007/07), HORT CD (2008/06), VET CD (2003/11), PLANT GENE CD (2008/08), SOIL CD (2007/04), PARASITE CD (2005/07), FSTA (2007/10), CAB ABSTRACT (2005/11), TREE CD (2004/10), FOREST SCIENCE CD (2008/07), ANIMAL PROD. CD (2008/11), VETEARINARY CD (2008/8), AGRICOLA CD (2007/6) is also subscribed for renewal. ABIS can be availed through request to sac.cdrom@gmail.com addressing to the Director, SAC. The information seeker should mention the keywords, title of CD-ROM database and the range of years for which references are needed.

C. Video Conferencing Facility

SAARC Agriculture Centre (SAC) has a unique video conferencing facility within the office premises and is being continuously used for conduction of skype based expert consultation meeting as well as for communication & discussion with other international/regional platforms, as and when required.

D. Audio-Visual on Agro-Technology

The SAC has a repository of audio-visual materials on various aspects of improved agricultural practices, either collected from the pioneer Agricultural Institutions/Organizations and Universities of SAARC Member Countries or produced/dubbed by the Centre. There are 370 video films, out of which 314 were collected from SAARC Member Countries, 48 were produced and dubbed respectively at the SAC. Many of these Videos can be accessed in YouTube linked with the SAC website.

Audio-Visual materials available in the SAC

Sl.	Title of the Videos	Name of the File Short Code
1.	Agricultural Technology Development in Barind in Bangladesh	001_Barind
2.	Apple Cultivation in Nepal	002_Apple
3.	Appropriate Farm Mechanization in Bangladesh	003_Farm_Bangladesh
4.	Bamboo and Its Propagation in Bangladesh	004_Bamboo https://youtu.be/P3aU1Tkt7gM
5.	Bangladesh Rice Research Institute and Its Success	005_BRRI
6.	Black Bengal Goats in Bangladesh	006_Goats https://www.youtube.com/watch?v=dPQN1XzGR3g https://www.youtube.com/watch?v=dPQN1XzGR3g
7.	Bee keeping in Nepal	007_Bee keeping
8.	Coffee Cultivation in Nepal	008_Coffee Cultivation
9.	Community Based Mushroom Management in Bhutan	009_Mushroom_Bhutan
10.	Compost Production in Sri Lanka	010_Compost
11.	Current Practice of Sericulture in Bangladesh	011_Sericulture

Sl.	Title of the Videos	Name of the File Short Code
12	Drip Irrigation in Pakistan	012_Drip_Irrigation https://youtu.be/SEZQhWRPV08
13	Farm Mechanization in Bhutan	013_Farm_Bhutan
14	Floriculture in India and its Prospects	014_Floriculture
15	Integrated Pest Management in Nepal	015_IPM_Nepal
16	Integrated Pest Management in Sri Lanka	016_IPM_SriLanka
17	Jackfruits in Sri Lanka	017_Jackfruits
18	Kithul Tree in Sri Lanka	018_Kithul_Tree
19	Livestock Development in Bhutan	019_Livestock
20	Make Money from Ornamental Plants in Sri Lanka	020_Ornamental_Plants
21	Mandarin in Bhutan	021_Mandarin
22	Mango Production and Post-Harvest Management in Pakistan	022_Mango
23	Marvels of Himalayan Herbs – India	023_Marvels
24	Milk Production Cooperative System in Nepal	024_Milk_Production
25	Milk Testing Method for Hidden Mastitis – Pakistan	025_Milk_Testing
26	Multi Operations Machine for Agriculture – Pakistan	026_Machine
27	Mushroom Farming Through Artificially Cultured Spawn Production in Nepal	027_Mushroom_Nepal
28	Ornamental Fish Breeding and Culture in India	028_Ornamental_Fish
29	Ornamental Foliage Plants in Sri Lanka	029_Foliage_Plants
30	Biological Control of Helicoverpa armigera in Cotton and Chickpea – India	030_Cotton
31	Post-harvest Technology of Major Fruit crops in Sri Lanka	031_Post_Harvest
32	Potato Production from True Potato Seed (TPS) – Nepal	032_Potato_TPS
33	Poultry Farming for Rural Women in Nepal	033_Poultry
34	Rice Cultivation in Sri Lanka (Triumph of Golden Panic)	034_Rice
35	Science and Practice of Mushroom Growing in India	035_Mushroom_India
36	Seed Production for Better Crops in Nepal	036_Seed_Nepal
37	Self Paddy Seed Production in Sri Lanka	037_Seed_SriLanka
38	Simple Hydroponics in Sri Lanka	038_Hydroponics
39	Sprinkler Irrigation in Pakistan	039_Sprinkler_Irrigation
40	The Success Stories of Dairy Development in SAARC Countries (Nepal)	040_Dairy
41	Technology of Rubber Cultivation in Sri Lanka	041_Rubber
42	Tea Cultivation and Processing in Sri Lanka	042_Tea
43	The Success Story of Rinderpest Eradication in Nepal	043_Rinderpest
44	Transplanted Sugarcane in Bangladesh	044_Sugarcane
45	Triumph of Golden Harvest – Sri Lanka	045_Golden_Harvest
46	Upgrading of Milk Production Through Artificially Insemination of Local Cows in Nepal	046_Milk Upgrading
47	Virus-free Potato Seed Production Through Tissue Culture in Nepal	047_Virus_free_Potato

Sl.	Title of the Videos	Name of the File Short Code
48	Wheat: From Deficit to Surplus: A Spectacular Story – India	048_Wheat
49	Cultivation of Rabi Medicinal Plants – India	049_Medicinal plants
50	Higher Income from Cultivation of off-season Vegetables in the Hills – India	050_Vegetables
51	Greening the Sea: The Story of Green Mussel Cultivation in India	051_Green Mussel
52	Yellow fin Tuna Fishing: Some Glimpses – India	052_Tuna Fishing
53	Tea Manufacture (CTC) – Sri Lanka	053_Tea
54	New Horizons in Mariculture: Culture of Seabass in open Sea Cage – India	054_Mariculture
55	CMFRI: The Saga Continues – India	055_Saga Continues
56	Farming Jewels from the Sea – India	056_Jewel Farming
57	CIFT-The Wave Riders – India	057_Wave Riders_1 057_Wave Riders_2
58	HACCP in food processing plants – India	058_Food Processing
59	The pre-requisite programme-GMP & SSOP – India	059_GMP & SSOP
60	Wealth from waste-livestock feed from cephalopod processing waste – India	060_Feed from waste
61	Fabrication and maintenance of fishing nets – India	061_Fishing net
62	Catfish (Magur) farming – India	062_Catfish farming
63	Freshwater prawn hatchery for boosting prawn production – India	063_Prawn hatchery
64	CIFA: gateway of aquaculture – India	064_Aquaculture
65	Poultry Passion in India	065_Poultry
66	CPRI in Tune with the Time – India	066_Potato research
67	Potato Seed Production in India	067_Potato seed
68	ICRISAT helping and poverty through Inclusive Market Oriented Development – India	068_ICRISAT_01
69	ICRISAT pigeon pea genome sequence – India	069_ICRISAT_02
70	ICRISAT – NASFAM partnership – India	070_ICRISAT_03
71	Preparation of Vermicompost – India	071_ICRISAT_04
72	Integrated water management- A successful story, Kothapally – India	072_ICRISAT_05
73	Watershed Project Kothapally- Success story – India	073_ICRISAT_06
74	National Research Centre for Agroforestry in service of nation – India	074_Agroforestry
75	Documentary on National Resource Conservation through Watershed Development – India	075_Watershed
76	Directorate of Wheat Research (DWR) profile – India	076_DWR profile
77	RCT for increased wheat production in India	077_RCT wheat
78	Honey Bee – Pakistan	078_Honey Bee
79	Area Specific Mineral Mixture for improving productivity in animals – India	079_Mineral Mixture

Sl.	Title of the Videos	Name of the File Short Code
80	Improving quality and utilization of poor quality roughages – India	080_Roughages
81	Azolla cultivation for livestock feeding – India	081_Azolla
82	Complete feed block – India	082_Feed block
83	NIANP – Looks Ahead – India	083_NIANP Looks
84	Exploring Mithun: Journey Ahead – India	084_Mithun
85	Importance of Weed Management – India	085_Weed Management
86	Parthenium Management – India	086_Parthenium
87	Threat of Invasive Weeds in India	087_Invasive Weeds
88	Directorate of Weed Science Research (DWSR) Profile – India	088_DWSR Profile
89	Enlivening the Thar Desert – India	089_Thar Desert
90	Jute Reinvented – India	090_Jute Reinvented
91	The Jute Non-woven in agriculture	091_Jute Non Woven_1 091_Jute Non Woven_2
92	Central Plantation Crops Research Institute (CPCRI): For Farmers Prosperity (English) – India	092_CPCRI_1 092_CPCRI_2
93	A Tale of Central Tobacco Research Institute (CTRI) – India	093_CTRI_1 093_CTRI_2
94	Shrimp culture – India	094_Shrimp
95	Mud Crab farming and fattening by women – India	095_Mud Crab
96	Fish Food products development and marketing by women self-help groups – India	096_Fish Food
97	Aqua feed development by women self-help groups – India	097_Aqua Feed
98	Diversification of livelihoods among the coastal women self-help group – India	098_Coastal Women
99	Sri Lankan Spices for Better Quality	099_Spices
100	Sweet Sorghum- A smart bio fuel Crop – India	100_Sweet Sorghum
101	Central Institute of Brackish-water Aquaculture (CIBA) profile and Programmes – India	101_CIBA profile
102	Cultivation of Rabi Medicinal Plants – India	102_Medicinal Plants
103	Herbal wealth of India	103_Herbal wealth
104	Good Agricultural and Collection practices of Medicinal Plants – India	104_Medicinal Plants_1 104_Medicinal Plants_2 104_Medicinal Plants_3 104_Medicinal Plants_4 104_Medicinal Plants_5 104_Medicinal Plants_6 104_Medicinal Plants_7 104_Medicinal Plants_8
105	Indian Fisheries – a success story	105_Indian Fisheries
106	Polythene Film Technology (PFT), ICIMOD – Nepal	106_Polythene
107	Sloping Agricultural Land Technology, ICIMOD – Nepal	107_Sloping Land
108	Warning Signals from the Apple Valleys, ICIMOD – Nepal	108_Apple Valleys

Sl.	Title of the Videos	Name of the File Short Code
109	ICIMOD Demonstration and Training – Godavari – Nepal	109_Godavari_1 109_Godavari_2
110	In the Grip of Drought, ICIMOD – Nepal	110_Drought
111	Living with Floods, ICIMOD – Nepal	111_Floods
112	Promoting Herbal Gardens in School, ICIMOD – Nepal	112_Herbal Gardens
113	Too Much Water; Too Little Water, ICIMOD – Nepal	113_Water
114	Documentary on G.B. Agricultural University – India	114_GB University
115	Greedy Fish Farmer – India	115_Greedy Fish
116	Little Fishes and Tiny Nets – India	116_Tiny Nets
117	Environment of Sri Lanka	117_Environment
118	Over use of Fertilizers	118_Fertilizers
119	Use of Straight Fertilizer – Sri Lanka	119_Straight Fertilizer
120	Use of Organic Fertilizer – Sri Lanka	120_Organic Fertilizer
121	Compost as a Fertilizer – Sri Lanka	121_Compost Fertilizer https://youtu.be/jwR6qch3IP0
122	Large Scale Compost Making – Sri Lanka	122_Compost Making https://youtu.be/AzPuS6Qed6M
123	Use of Straw as a Fertilizer – Sri Lanka	123_Straw fertilizer https://youtu.be/00CBswiM_rw
124	Use of Azolla as a Fertilizer – Sri Lanka	124_Azolla Fertilizer https://youtu.be/YQDWRpmwo4A
125	Beekeeping (part I – VII) – Sri Lanka	125_Beekeeping https://youtu.be/1uPIVWKMUSU
126	Runkarale Jaya – Sri Lanka	126_Runkarale https://youtu.be/hG2Y5eld1BY
127	Seed Potato Production (from field preparation to vesting) – India	127_Seed potato https://youtu.be/UI1d6QipqMMI
128	Hybrid Rice Seed Production Technology – India	128_Hybrid rice https://youtu.be/lqpfH8C7zqE
129	Integrated Pest Management in Rice – India	129_IPM rice https://youtu.be/9BWUhlhZhSs
130	Quality Protein Maize (QPM) for Improved Nutrition – India	130_Maize https://youtu.be/LTpj-qq1yyA
131	Cotton Plant by-products and their Utilization – India	131_Cotton https://youtu.be/hjJsEwnjvQ0
132.	Success Story of IPM in Rainfed Cotton – India	132_IPM cotton https://youtu.be/fNyxu3MRxQA
133.	Backyard Rearing of Improved Nicobari Fowls for Increased Income – India	133_Nicobari https://youtu.be/Gzu6YzedIWA
134.	Weed Control in Cropping System – India	134_Weed https://youtu.be/NzamtX7FgH4
135.	Honey Production for Additional Employment and Income Generation – India	135_Honey https://youtu.be/R6rI0ePrsyM

Sl.	Title of the Videos	Name of the File Short Code
136.	Year Round Fodder Production – India	136_Fodder https://youtu.be/92vivCuFRSg
137.	Fishing Nets Fabrication and Maintenance – India	137_Fishing Nets https://youtu.be/0FUeCJpkbUg
138.	ICAR Shrimp Culture – India	138_Shrimp Culture https://youtu.be/TYRejE8dk64
139.	Reservoir Fisheries Management – India	139_Fisheries https://youtu.be/r1DU9NVw4JA
140.	Freshwater Prawn Hatcheries – India	140_Hatcheries https://youtu.be/MG4Lf-uQFdk
141.	Marine Pearl Culture – India	141_Pearl https://youtu.be/RIqzIwb1PN8
142.	Catfish Farming – India	142_Catfish https://youtu.be/dVzB1IzaA3I
143.	Himalayan Mahseer Breeding and Culture – India	143_Fish Breeding https://youtu.be/BLkmXIANUMY
144.	Animal Health Care – India	144_Animal Health https://youtu.be/T80hWCF3sZg
145.	Hygienic Meat and Meat Product Processing and Packaging – India	145_Hygienic Meat https://youtu.be/6AUKVd7ug6c
146.	Hygienic Milk and Milk Product Processing and Packaging – India	146_Hygienic Milk https://youtu.be/KpoXNbNPZyA
147.	Sheep Rearing for Carpet and Fine Wood Production – India	147_Carpet https://youtu.be/DA10hgSGG3k
148.	Pig Production – High Focus in North –East Region – India	148_Pig Production https://youtu.be/yKN-PS7SS_8
149.	Rural Poultry Production for Income and Household Nutritional Security - India	149_Rural Poultry https://youtu.be/SIRzABCHvKc
150.	Improving Quality and Utilization of Poor Quality Roughages – India	150_Roughages https://youtu.be/km_1m0j259w
151.	Mineral Mixture for Increased Animal Productivity – India	151_Mineral Mixture https://youtu.be/Oy0jN46W2OY
152.	Garole Sheep Farming for Increased Income – India	152_Garole Sheep https://youtu.be/fZHnoiQ0eEE
153.	Vermi-composting using Plantation Material Waste – India	153_Vermi Compost https://youtu.be/_5NLLyrV8oM
154.	Water Resources Management Under Rainfed Farming Through Community Action – India	154_Water Resources https://youtu.be/nquh01I3brk
155.	Drainage for Reclamation of Waterlogged Saline Soils – India	155_Waterlogged https://youtu.be/x33Iue3crc0
156.	Resource Conservation Technologies for Increasing Wheat Production – India	156_Wheat Production https://youtu.be/x5wGGWUwn0
157.	Construction and Environment Control of Greenhouses – India	157_Greenhouses https://youtu.be/ADfIvefULIU

Sl.	Title of the Videos	Name of the File Short Code
158.	Efficient Use of Water in Agriculture – India	158_Water Use https://youtu.be/ASS6eEVhrps
159.	Coping with Intermittent Drought Spells – India	159_Drought Spells https://youtu.be/yIk-BCI_228
160.	Cultivation of Horticultural Crops in Arid Zone – India	160_Horticulture https://youtu.be/sJ4Wffzu0jQ
161.	Protected cultivation of Capsicum and Tomato – India	161_Capsicum https://youtu.be/HBZVOwCL8ME
162.	Production of Quality Vegetable Seedlings – India	162_Vegetable https://youtu.be/MyL4Wou6Lz0
163.	Post-Harvest Management of Onion and Garlic – India	163_Onion https://youtu.be/qriW6azpRIw
164.	Reducing Drudgery of Farm Women in Farm Operations – India	164_Farm Women https://youtu.be/mKWkO71eAqI
165.	Mechanized Sugarcane Production: Save Labour and Earn More – India	165_Sugarcane https://youtu.be/JYhN1ICiYFo
166.	Meneke Rose Garden – Sri Lanka	166_Meneka https://youtu.be/Ru-Z6zrOkY
167.	Vikasitha: Rose Garden – Sri Lanka	167_Vikasitha https://youtu.be/GnJMuZr4MOs
168.	Protected Agriculture (Vegetable Grower) – Sri Lanka	168_Vegetable https://youtu.be/AVOnAtJU8ik
169.	Finger Millet Field story – Sri Lanka	169_Finger Miet https://youtu.be/NyUmJOPEAk
170.	Ornamental Leaves – Sri Lanka	170_Ornamental Leaves https://youtu.be/40gy39focOg
171.	Rathna Papaya Variety – Sri Lanka	171_Rathna Pappya https://youtu.be/HKgtOq_OhA
172.	Seed Paddy Production – Sri Lanka	172_Seed Paddy https://youtu.be/a8CYAIAZ-tc
173.	Fluid Bed Tea Drier – Sri Lanka	173_Tea Drier https://youtu.be/nlqdGYX0wf4
174.	Soil Fertility in Tea – Sri Lanka	174_Soil Fertility https://youtu.be/P8PeokL2OWM
175.	Harvesting Tea – Sri Lanka	175_Harvesting Tea https://youtu.be/Vfz-ugYNFsY
176.	Tea Nursery Management – Sri Lanka	176_Tea Nursery https://youtu.be/hsbI4WMfK5Q
177.	Field Practices in Tea – Sri Lanka	177_Field Tea https://youtu.be/vh6EqISZIDw
178.	Graphs from dumbulla – Sri Lanka	178_Graphs https://youtu.be/6VhoqvMwOk
179.	Agricultural Light Engineering Programme (ALEP) – Pakistan	179_ALEP https://youtu.be/6IsvQsxIiNw

Sl.	Title of the Videos	Name of the File Short Code
180.	Introduction of Livestock Production Research Institute – Pakistan	180_Livestock https://youtu.be/S0uIIIfylPE
181.	Paddy Straw Treatment with Urea – Pakistan	181_Paddy Straw https://youtu.be/k-Xs_BnrV-Q
182.	Clean and Hygienic Milk Production – Pakistan	182_Hygienic Milk https://youtu.be/UGVR6BuSFW8
183.	Silage Making – Pakistan	183_Silage Making https://youtu.be/izSaXJxoRNw
184.	Welcome to NARC – Pakistan	184_NARC https://youtu.be/69pTK8ONUvQ
185.	Urea Treated Fodder – Pakistan	185_Urea Fodder https://youtu.be/aDvRI-rOMA4
186.	Livestock Research for Prosperity – Pakistan	186_Livestock https://youtu.be/33SxGxlD21w
187.	Sugarcane – Pakistan	187_Sugarcane https://youtu.be/Jgismw4cOoTM
188.	Soil Erosion – Pakistan	188_Soil Erosion https://youtu.be/uLEWUJDjF14
189.	Peach Cultivation – Pakistan	189_Peach Cultivation https://youtu.be/E7_w3ToXF1U
190.	Buffalo Management – Pakistan	190_Buffalo https://youtu.be/jO7tnsItBZo
191.	Rice Nursery Growing for Transplantation – Pakistan	191_Rice Nursery https://youtu.be/8v-V27QABfg
192.	Off Session Vegetables – Pakistan	192_Vegetables https://youtu.be/Vr9fI3tpvyM
193.	Canola Oil – Pakistan	193_Canola Oil https://youtu.be/CbEX-7Dtuds
194.	Buffalo: From experts point of view – Pakistan	194_Buffalo https://youtu.be/GIuVXn4nAVc
195.	Wheat: Preparation of land – Pakistan	195_Wheat https://youtu.be/Es07F2lVLoI
196.	Agricultural Sustainability – Pakistan	196_Agriculture https://youtu.be/z-pk8VUm6uc
197.	Bio Pesticide – Pakistan	197_Bio Pesticide https://youtu.be/71ciLPaelhI
198.	Role of Women in Agriculture – Pakistan	198_Women https://youtu.be/OSxt8Iyy-4o
199.	Mott Grass – Pakistan	199_Mott Grass https://youtu.be/2ejBiTBeWtM
200.	Cotton Virus (Preventive measures) – Pakistan	200_Cotton Virus https://youtu.be/F-xoZ6esOvQ
201.	Cotton Virus (Research Aspects) – Pakistan	201_Cotton Research https://youtu.be/A0EFmQmH7-o

Sl.	Title of the Videos	Name of the File Short Code
202.	Balance Use of Fertilizer – Pakistan	202_Fertilizer https://youtu.be/p14J0_CNruM
203.	A Video on NWFP Agriculture University – Serving Agriculture – Pakistan	203_NWFP https://youtu.be/jlOIPDt-w_Q
204.	Manage of Plant Protection on fruit crops in Bhutan	204_Fruit Crop https://youtu.be/HGks3pMDPj0
205.	National Irrigation Policy – Bhutan	205_Irrigation Policy https://youtu.be/qZBIBE9sZV0
206.	Citrus Growing in Bhutan	206_Citrus Growing https://youtu.be/QAM_Qix6uMg
207.	NRTI Participation in the Laya Yak – Bhutan	207_Laya Yak https://youtu.be/N8wyPVHvMmc
208.	Tree Beatification – India	208_Tree Beatification https://youtu.be/7BGUF7z0Khw
209.	Humming Honey Maker – India	209_Honey Maker https://youtu.be/I2yEtIXpSwY
210.	Teak Defoliators – India	210_Teak Defoliators https://youtu.be/TsN0VJBj-e0
211.	Tea Plantation in India	211_Tea Plantation https://youtu.be/UJXZmCV1WII
212.	Tissue Culture in Pakistan	212_Tissue Culture https://youtu.be/v1HynjQp30c
213.	TPS: A New Technology in Pakistan	213_TPS https://youtu.be/xUbHS0pIuf4
214.	NRCS The Crusader for Success Story of Soybean in India	214_Soybean https://youtu.be/8jY9kiPBjNI
215.	Cultivation Technology of Button and Oyster Mushroom in India	215_Mushroom https://youtu.be/9DPrkLPg9YY
216.	Pruning of Fruit Trees – Pakistan	216_Pruning https://youtu.be/Vs9SyNNS57Y
217.	Blight Disease and Control in Chickpea – Pakistan	217_Chickpea https://youtu.be/DBAynpwJWi8
218.	Utilization of Salt-Affected Lands in Joint Satiana Pilot – Pakistan	218_Salt Land https://youtu.be/2EXNDHnzd1I
219.	Method of Raising Eucalyptus Nursery – Pakistan	219_Eucalyptus https://youtu.be/CbRNggMvqPY
220.	Tea Cultivation – Pakistan	220_Tea Cultivation https://youtu.be/ZRMf4tX86nU
221.	Cooperative Society: Nakka Kahut – Pakistan	221_Cooperative https://youtu.be/VLK836VC4y8
222.	Visitors Book: Rational Use of Potash in Pakistan	222_Potash https://youtu.be/bIm2Tit-ta4
223.	Yak Husbandry – Nepal	223_Yak Husbandry https://youtu.be/jFPMTTrKZwv8

Sl.	Title of the Videos	Name of the File Short Code
224.	Cane Tech Spot Films – India	224_Cane Tech https://youtu.be/8Xw3BD8uAhk
225.	Early Planting Sugarcane – India	225_Sugar Plant https://youtu.be/jhaLXGV9DiE
226.	Sugarcane Seed Nursery Programme – India	226_Sugarcane Seed https://youtu.be/fb0qDdL3HVg
227.	Bio Fertilizer – India	227_Bio Fertilizer https://youtu.be/uApwPFM8CXw
228.	Participatory Research With Women Farmers (ICRISAT) – India	228_Women Farmers https://youtu.be/VURwirtEUdo
229.	Hygienic Milk – India (Telecasted by Bangladesh Television)	229_Hygienic Milk https://youtu.be/izUUksPrBsI
230.	Drip Irrigation – Pakistan (Telecasted by Bangladesh Television)	230_Drip Irrigation https://youtu.be/gxwVK9sqURo https://youtu.be/2g1z3qyrk1s
231.	Green House Vegetable – India (Telecasted by Bangladesh Television)	231_Vegetable
232.	Sprinkler Irrigation – Pakistan (Telecasted by Bangladesh Television)	232_Irrigation https://youtu.be/oSJSgtVeDtA
233.	Maize Production – India (Telecasted by Bangladesh Television)	233_Maize https://youtu.be/H9_SdELOyxM
234.	Off-Season Vegetable – India (Telecasted by Bangladesh Television)	234_Vegetable https://youtu.be/swr-6RYanPQ
235.	Potato Seed Production – India (Telecasted by Bangladesh Television)	235_Potato Seed https://youtu.be/QIc17SlqTEM
236.	Vegetable Seed Production in Nepal	236_Vegetable https://youtu.be/Z85SDxTu5b4
237.	Trout Fish Culture – Nepal	237_Trout Fish https://youtu.be/Tln3-PIHcPY
238.	Potato Production from Seed – Nepal	238_Potato Seed https://youtu.be/frfHzeaipMU
239.	High Hill Horticulture Development – Nepal	239_Hill Horticulture https://youtu.be/pIxL0fZ1A3E
240.	Ginger Drying Technology - Nepal	240_Ginger https://youtu.be/IE_fUZhXKsw
241.	Embryo Transfer in cows – India	241_Embryo https://youtu.be/3JNRXL6geBI
242.	Neem: An analysis – India	242_Neem https://youtu.be/NjpMS3ojxoY
243.	Azolla – India	243_Azolla https://youtu.be/M3I13wHvXQg
244.	Thanjayur wilt diseases of Coconut Tree – India	244_Thanjayur https://youtu.be/3c_OAoDZ78I
245.	Neem in Insect Control – India	245_Neem https://youtu.be/c6Wud7NAV70

Sl.	Title of the Videos	Name of the File Short Code
246.	Tamil Nadu Prosperity Through Agricultural Biotechnology – India	246_Biotechnology https://youtu.be/rlgMorm7wF0
247.	About TNAU – India	247_TNAU https://youtu.be/63xNrfihvUA
248.	Soybean Cultivation – India	248_Soybean https://youtu.be/I3G2_H9txM0
249.	Bamboo: A crop – India	249_Bamboo https://youtu.be/OejWSnUweFI
250.	Improving Women Through Social Engineering (CIRDAP) – India	250_Inprove Women https://youtu.be/vQA8AeCmGSE

2. SAARC Agriculture PhD Scholarships Programme

SAARC Agriculture Centre started its SAARC Agriculture PhD Scholarship Programme in 2017 and altogether 6 fellows from different SAARC member states have benefitted from this programme so far. Three fellows one each from Afghanistan, Bangladesh and Nepal completed their PhD degrees by 2022, similarly one fellow from India, completed her PhD in 2023, while two fellows, one from India and one from Sri Lanka are undertaking their research programme at CIFT, Kochi, India and PGIA, University of Peradeniya.

There were two progress sharing meetings of the fellows during the months June and December 2023 in virtual mode. Dr. Md. Baktar Hossain, Director, SAC chaired the programme the June meeting, while Dr Md. Harunur Rasheed, Director, SAC, chaired the December meeting and PhD fellows of SAARC Agriculture PhD Programme shared the progress reports of their research activities.

3. Other Regular Activities

3.1 Amor Ekushe Book Fair: SAARC Agriculture Centre Book Stall in Bangla Academy Premises



SAARC Agriculture Centre (SAC) took part in the 21st Book Fair 2023 (Omor Ekusha Boi Mela) at Bangla Academy Premises, Dhaka, Bangladesh from 01-28 February 2023. Around 200 books of different categories focusing on agriculture and allied disciplines, published by the SAARC Agriculture Centre, were displayed at the stall of SAARC Agriculture Centre. The main objective of participating in such fairs is to create awareness

among the visitors about the SAARC Agriculture Centre in South Asia. Around three thousand people visited the SAC stall and learned about the presence of SAC in Bangladesh and its activities in South Asia. Additionally, about 30 books were also sold during this fair. Dr. Shaikh Mohammad Bokhtiar, Executive Chairman, BARC, Ambassador Abdul Motalib Sarker, Director General (SAARC and BIMSTEC), MoFA and Mr. Md. Shamsul Haque, Former Additional Secretary, MoFA visited the SAC stall during the fair. Besides, the new publications of the SAC were also unveiled during this fair.

On 22 February, 2023, the Ambassador Motalib Sarker, DG, SAARC & BIMSTEC unveiled the book titled Cross-Learning for Addressing Emergent Challenges of Aquaculture and Fisheries in South Asia which was published in 2022. While at the time of releasing the SAC publication in front of the journalists and visitors at the national book fair, The Chief guest, Mr. Sarker said that it would help in increasing the visibility of SAARC among the visitors. Dr. Md. Baktear Hossain, Director, SAC and other SAC officials were also present on the stage at the time of release of this book.

Similarly, Dr. Shaikh Mohammad Bokhtiar, Chairman, BARC unveiled another book entitled Enhancing Sustainable Livelihoods and Nutritional Security in the Hilly Regions of SAARC Countries through Horticultural Approach on the 27th of February 2023. Unveiling the newly published book of the Centre, Dr. Bokhtiar highlighted the importance of horticulture for enhancing livelihoods of people in the hills of SAARC region and hoped that the book would serve as an excellent resource for hill agriculture in the region.

3.2 Felicitation of the Newly Appointed Secretary, MoA

On the behalf of SAARC Agriculture Centre, Director, Dr. Md. Baktear Hossain extended heartfelt congratulations to Mrs. Wahida Akter for being appointed as the Secretary for the Ministry of Agriculture (MoA), Government of Bangladesh. Congratulating Mrs. Akter Dr. Baktear, hoped that under the able and dynamic stewardship of the newly appointed Secretary, SAC will achieve its goals to ensure sustainable food and nutritional security in the region.



3.3 The First SAARC Agriculture PhD Fellow Received Degree

On 13 January, 2023, the first beneficiary of the SAARC Agriculture PhD Scholarship Programme Ms. Rafeza Begum Ranu of Bangladesh, received PhD Degree from Bangladesh Agricultural University (BAU), Mymensingh. Subsequently, she handed over her PhD thesis to Dr. Md. Baktear Hossain, Director SAC. She also handed over the thesis to the honorable Executive Chairman of Bangladesh Agriculture Research Council (BARC), and the former director of SAC, Dr. Shaikh Md. Bokhtiar who introduced the SAARC

Agriculture PhD Scholarship as a flagship program in 2017. Dr Baktear heartily congratulated Dr Ranu for her excellent work under the scholastic guidance of Prof. Dr. M. Jahiruddin, of Soil Science Department of BAU. Dr. Ranu has published a couple of papers in the peer reviewed high impact factor journals.



The First SAARC Agriculture PhD Fellow Received Degree

3.4 Participation in Poultry Convention 2023

Director of SAC Dr. Md. Baktear Hossain and the Senior Technical Officer Dr. Md. Younus Ali, a poultry expert attended the First Bangladesh Poultry Convention-2023 at Sher E Bangla Agriculture University, Dhaka organized by the Poultry Professionals of Bangladesh, on the 30th of January 2023. Director Dr. Hossain, chaired a very important session of the Convention Prospects on Trade of Poultry and its products in South Asia.



3.5 SAC Participated to the Conference of BAEN



Director, SAC Dr. Md. Baktar Hossain and the Professionals, Dr. Nasreen Sultana, Senior Program Specialist (Horticulture), Dr. Sreekanth Attalurri, Senior Program Specialist (Crops) and Dr. Grinson Goerge, Senior Program Specialist (Fisheries) along with the Senior Program Officer (NRM), Dr. Fatema Nasrin Jahan and Senior Technical Officer, Dr. Md. Younus Ali participated in the International Conference on Food and Nutritional Security for achieving SDGs in SAARC Countries at the BRAC CDM Saver, Dhaka organized by Society for Bangladesh Agricultural Extension Network (BAEN) and Participatory Rural Development Initiatives Society (PRDIS) India on 02-04, February 2023. SAC Director, Dr Hossain with Dr. Wais Kabir Co-Chaired the Technical Session II on Extension approaches and strategies to promote sustainable, Climate resilient, nutrition sensitive, profitable agriculture and allied sectors. Dr. Grinson George, SPS (Fisheries) presented a paper on ‘Food and Nutrition Security for Achieving Sustainable Development Goals (SDGs) in SAARC Countries: Revisiting Extension Approaches’.



3.6 Meeting with APAARI

On 15th February, 2023, Dr. Ravi Khetarpal, the Executive Secretary of the Asia Pacific Association of Agricultural Research Institutions (APAARI) and his team visited the SAC office and discussed with the SAC Director and Professionals on possibilities of future collaborative projects in the region.



3.7 Meeting with the Director General, IRRI

On 19th February, 2023, Dr. Jean Balie, Director General of the International Rice Research Institute (IRRI) & Regional Director, South East Asia and Pacific, CGIAR and his team including Joanna Kane Potaka, Deputy Director General for Strategy Engagement and Impact, IRRI and Dr. Humnath Bhandari, Country Representative, IRRI Bangladesh visited SAC and held a meeting with the Director SAC and Professionals, regarding future collaborative projects in the region. At the end of the meeting, it was agreed to initiate a process of developing a concept note for a collaborative project.



3.8 Meeting with the SACRP Director

On 15th March, 2023, Dr. Shiv Kumar Agrawal, Regional Coordinator, South Asia and China Regional Programme (SACRP) of the International Center for Agricultural Research in the Dry Areas (ICARDA), India accompanied with Dr. Md. Hossain, former Director, Pulse Research Centre, Bangladesh Agricultural Research Institute (BARI) visited SAARC Agriculture Centre and discussed with SAC team about the common interest of collaboration. The Director expressed his keen interest to sign an MOU with the SAC for future collaboration. SAC team was instructed to draft and share a MoU between two organizations.



3.9 Meeting with the World Bank Team in Dhaka

On 16 March, 2023 a SAC team led by the Director Dr. Md. Baktar Hossain visited the World Bank office in Dhaka to discuss about potential areas of cooperation between two institutions. Ms. Gayatri Acharya, Sector Leader for the Sustainable Development Practice Group of the World Bank, led a team from the Bank's side for the discussion. Director Dr. Hossain made a presentation about SAC activities and invited for discussion on the areas of potential future collaboration. Ms. Gayatri expressed keen interest to invest in the Livestock program of SAC specially to control the Trans-boundary Animal Diseases (TADs) in the South Asian region.



3.10 New Editor for SAARC Journal of Agriculture



Dr. Ganga Dutta Acharya, Senior Program Specialist (Priority Setting and Program Development), SAC, has been assigned as new Managing Editor for the **SAARC Journal of Agriculture** since March 2022.

Dr Grinson George, SPS (Fisheries) was taking charge of the Journal. However, with the completion of his tenure at SAC at the end of February, the responsibility has been transferred to Dr. Acharya.

3.11 Director SAC Participated in the workshop of FSAB

Director, SAC Dr. Md. Baktar Hossain participated in a workshop on Harmonization of the Food Safety Standard and Regulations held at intercontinental Hotel Dhaka organized by the Food safety Authority of Bangladesh (FSAB) on the 25th of March 2023. The honorable Cabinet Secretary Mr. Md. Mahub Hossain, attended the program as Chief Guest. Mr. Md. Ismiel Hossain, Secretary, Ministry of Food, and Ms. Wahida Akter, Secretary, Ministry of Agriculture were also present as the Special Guest. The programme was chaired by Mr. Md. Abdul Kayowm Sarker, Chairman Bangladesh Food Safety Authority. Dr. Sanjay Dabe, former Global Chairman, Codex Alimentarius Commission and a reputed international food safety expert delivered the keynote speech in the programme.



3.12 Director Bay of Bengal Programme, India visited SAC



On March 27, the Director, the Bay of Bengal Programme-Inter-Governmental Organization (BoBP-IGO, based in India), Dr Krishnan Pandian visited the SAARC Agriculture Centre (SAC). the Director Dr. Md. Baktear Hossain and other professional staffs interacted with Dr. Krishnan regarding future collaboration between two organizations with respect to sustainable development and utilization of marine fisheries resources in the region with a focus on small-scale and artisanal fishers.

3.13 Director attended, The Kingdom of Belgium Embassy programme

On March 28th 2023, Director SAARC Agriculture Centre (SAC) Dr. Md. Baktear Hossain along with Senior Technical Officer (STO), Dr. Md. Younus Ali and Senior Programme Officer (NRM), Dr. Fatema Nasrin Jahan attended the business seminar organized by the Embassy of the Kingdom of Belgium to Bangladesh at Pan Pacific Sonargaon Hotel, Dhaka on “Innovative Business Opportunities from Belgium”. His Excellency Ambassador of the Kingdom of Belgium to Bangladesh with residence in New Delhi, Mr. Didier Vanderhasselt led the regional trade mission to Bangladesh to explore business opportunities in developing agribusiness facilities in particularly in storage, transport, and processing fields.



3.14 SPS (Fisheries) completed his tenure at SAC



Dr. Grinson George, SPS (Fisheries) completed his three years tenure at SAARC Agriculture Centre (SAC) by 26 of February 2023. Dr. George a Principal Scientist (Fisheries) of the Indian Council of Agricultural Research has returned to his position at ICAR- Central Marine Fisheries Research Institute, Kochi completing three-year deputation tenure at SAC. While working at SAC Dr. George proved himself a dynamic

personality and involved actively in several regional and international activities not only to the fisheries but also in other sectors of agri-food systems. He has also worked as a Managing Editor of the SAARC Journal of Agriculture for a year in 2022.

SAARC Agriculture Centre organized a farewell ceremony for Dr. George, on 26th February at SAC Conference room. Dr. Md. Baktar Hossain, Director and all the staffs of SAC bid an emotional farewell to Dr. George wishes him the best in all his future endeavors.

3.15 SAC Welcomed Newly Recruited SPSs

Dr Md. Younous Ali joined SAARC Agriculture Centre as Senior Program Specialist (Livestock). He is PhD in poultry and has vast experience of working with the different national and international organizations and as well as with the SAARC Agriculture Centre Dhaka Bangladesh. SAARC Agriculture Centre organized a farewell ceremony for Dr. George, on 26th February at SAC Conference room. Dr. Md. Baktar Hossain, Director and all the staffs of SAC bid an emotional farewell to Dr. George wishes him the best in all his future endeavors.



Similarly Dr Sikander Khan Tanveer from Pakistan joined SAARC Agriculture Centre on the post of Senior Programme Specialist (Crops). Previously, he was working as National Coordinator Wheat Pakistan Agricultural Research Council (PARC), Ministry of National Food Security & Research Islamabad Pakistan.



The newly appointed Senior Programme Specialist (Crops) of SAARC Agriculture Centre Dr. Sikander Khan Tanveer met with honourable Executive Chairman of Bangladesh Agricultural Research Council Dr. Shaikh Mohammad Bokhtiar in his chamber. Dr. Bokhtiar welcomed him and discussed the salient feature of Bangladesh Agriculture. He also handed over his recent valuable publication "From Food Deficit to Food Surplus" to Dr. Tanveer.

3.16 Meeting with Agriculture and Finance Consultants, Germany and SSIL Bangladesh

A meeting was held on 11th April 2023 at the SAARC Agriculture Centre among the SAC, Agriculture and Finance Consultants, Germany and Services and Solutions International, Bangladesh aiming to prepare a report on Partnership Development in livestock and dairy sector of Bangladesh.

Dr. Manab Chakraborty, International Agro-Economist and Financial Expert, Livestock & Dairy Development Project, Dr. Md. Baktear Hossain, Director, SAARC Agriculture Centre, Dr. Md. Younus Ali, SPS (Livestock) and other consultants took part in the discussion meeting. SAC shared the views on how partnership could be used as a potent tool to promote the interest of small producers in the SAARC region.



3.17 Director SAC attended the ISARC - Bangladesh Partnership Meeting



The Director SAC joined the IRRI South Asia Regional Centre (ISARC) Coordination Committee (ICC) Meeting in Varanasi, India on 20 April 2023. The meeting was chaired by Dr. Jean Balié, Director General, IRRI and Mr. Manoj Ahuja, Secretary Ministry of DA & FW, India Co- Chaired the meeting. Ms. Wahida

Akter, Secretary, Ministry of Agriculture, Government of Bangladesh attended as a Guest of Honour. Dr. Sudhanshu Singh, Director, ISARC shared a detailed update on successful ISARC-led research and training activities and also presented specific activities for future plans in view of IRRI's mission to uplift the lives of farmers from the South Asia region. Dr. Ajay Kohli and other members of the ISARC Coordination Committee from India, Bangladesh and Nepal also participated in the meeting.

3.18 Secretary General of SAARC Paid a Visited to SAC

His Excellency Esala Ruwan Weerakoon and Madam Krishanti Weerakoon visited Bangladesh to join the 6th Indian Ocean Conference held in Dhaka on 12-13 May 2023. During this period the Secretary General of SAARC spent few short hours with SAC Director and discussed several issues of SAARC countries. During the stay in Dhaka Mrs. Weerakoon provided a etiquettes training to SAC personnels.



3.19 SAC Participated to the WOAHA General Meeting

A five-day World Organization for Animal Health (WOAH) General Session was held on 21-25 May 2023 in Paris, France. On behalf of the SARRC Agriculture Centre, Dr. Md. Baktear Hossain, Director SAC and Dr. Md. Younus Ali, SPS (Livestock) participated in the 90th WOAHA General Session. Around 182 member countries of WOAHA participated in the general session as national delegates of the respective countries. In the general session, different global and regional challenges of livestock sector focusing on *highly pathogenic avian influenza* (HPAI), Transboundary animal diseases (TADs), Zoonotic diseases, Biosafety and Bio-security, Lumpy skin disease (LSD) and Antimicrobial Resistance (AMR) issues were discussed in the session. From the session, different suggestions and recommendations came out which will also be helpful for the SAARC Member States. The aim of the visit was to develop partnership through interacting with different professionals and international organizations for sustainable livestock development in South Asia.

Beside the general sessions, different side meetings were also held, where Director SAC and SPS (livestock) took part in these meetings. A Side meeting event and discussion was held with the Regional Representative of the Asia & Pacific Region regarding the livestock program of the SAARC Agriculture Centre. A collaboration meeting was also held with Dr. Hifumi Kugita regional representative (Asia and Pacific region) on 26th May 2023, where Director SAC and SPS (Livestock) joined the meeting. Some collaborative programs with WOAHA on antimicrobial resistance, food safety, livestock feeds and feeding, PPR eradication etc were also held and there were detailed discussions regarding different issues of livestock. SAC had a consultation program "SAARC Regional Capacity Building activity on "Hands-on Training on Rabies

Diagnosis in Animals in the SAARC Region” in collaboration with WOAAH that was approved by the 14th GB meeting. There was a detailed discussion with Dr. Kugita about this approved training programme of SAC. For this training program, WOAAH showed its interest for possible financial cooperation, if SAC GB approves it, in its year 2023 meeting.



Meeting with CVO members of the SAARC member states



Meeting with CVO members of the SAARC member states SAC had a bi-lateral meeting with the Chief Veterinary Officers (CVO) forum of SAARC countries on 25th May 2023 at WOAAH meeting room. Among

the SAARC CVO's, Bangladesh, Bhutan, India and Nepal participated in the meeting. The meeting was held in coordination with Dr.Hifumi Kugita, Regional Representatives for Asia and Pacific of WOAAH and Alexandre Fediaevsky, GF- TAD Regional Coordinator of WOAAH. Among others Secretary, Ministry of Fisheries, Animal Husbandry & Dairying, Gov. of India was also present in this meeting. On behalf of the SAARC Agriculture Centre, Dr. Md. Baktear Hossain and Dr. Md. Younus Ali, SPS (livestock) were also present in the CVO forum meeting. The major outcome of the meeting was to conduct a CVO meeting in Dhaka under the hosting of Bangladesh in collaboration with WOAAH.



3.20 Side event meeting “World Café” focused on gender inequality

SAC team joined the world café meeting with some veterinary professions focused on gender inequality. Different WoAH member states joined the program. The major discussion topic was challenges and opportunities for women veterinary professionals in South Asia.

3.21 Joined the Inception Workshop of an APAARI project



On 01 June 2023, a two-member team of SAC comprising the Director, Dr. Md. Baktear Hossain and the Livestock expert Dr. Younus Ali SPS (Livestock) virtually attend the inception workshop of the Managing aflatoxin contamination in Asia using One Health organized by the Asia-Pacific Association of Agricultural

Research Institutions (APAARI) which was funded by the Standards and Trade Development Facility (STDF) in collaboration with International Institute for Tropical Agriculture (IITA), International Livestock Research Institute (ILRI), Centre for Agriculture and Bioscience International (CABI) and University of Minnesota. For the first time, the concept of One Health is integrated in aflatoxin management in Asia. Based on a collaborative, multisectoral and transdisciplinary approach, the project will aim to achieve optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment.

3.22 Promote and Enhance Regional Cooperation through Exchange of CSA Technology: C- SUCSeS Project



Consortium for Scaling-Up Climate Smart Agriculture in South Asia (C-SUCSeS) project of SAARC agriculture Centre (SAC) organized an exposure visit in Nepal from 12 to 16 June 2023. The exposure team consisted of researchers, scientists, farmers, extensionists, and policymakers from Bangladesh, India, Sri Lanka, Maldives, Bhutan, and Nepal. The main objectives of the exposure visit were to promote and enhance regional cooperation through the exchange of Climate Smart Agriculture (CSA) knowledge and sharing of experiences among the member states; expose policy makers, researchers, and extension agents to the CSA policies, strategies, and practices of Nepal and to build the capacity of stakeholders responsible for scaling up CSA technologies in their respective countries to achieve the intended objectives of the project.

The exposure team was introduced to Nepal's agriculture policies, strategies, and programs in general and elaborated more on the climate smart agriculture programs in Nepal. The Director General of the Department of Agriculture in Nepal, Dr. Hari Bahadur KC was present to welcome the delegates while he said in his presentation that all aspects of food security are potentially affected by climate change. Because of the impacts of climate change, Nepal witnessed major changes in the agricultural cropping calendar.

The SAARC Agriculture Centre's C-SUCSeS Project exposure team also visited Namobuddha Municipal Corporation, an ancient municipality mentioned in Mahabharat. It is situated just east of Kathmandu Valley. The team made a visit to the 'Climate Smart Village' (CSV) of Quikal under Namobuddha Municipal Corporation. It was developed by ICIMOD with the support of Climate Adaptation Project and is currently supported by the environment program of the Namobuddha Municipal. The team met its hilly dwellers where they established a knowledge hub with good practices to motivate other farmers to replicate the organic and environment-friendly approaches. Organic farming helps hilly dwellers of Nepal Municipality and other areas to adapt to climate change impact because it boosts soil's ability to retain water and natural nutrition, combat global warming by storing carbon in the soil, and makes the environment free from chemicals and pesticides.



The exposure team visited International Centre for Integrated Mountain Development (ICIMOD)

The exposure team visited International Centre for Integrated Mountain Development (ICIMOD) Headquarters in Kathmandu and made a courtesy call to the Director General of ICIMOD. During the visit, the Director General of ICIMOD expressed views on how the two organizations (SAC and ICIMOD) can work together to combat climate change impacts and build climate-resilient communities in the region. Later, the exposure team visited Godavari Knowledge Hub where around 90 innovative climate-smart and nature-based agricultural technologies have been showcased to form a rich knowledge hub.

The exposure team observed activities and asked questions to know more about innovative and climate-smart farming methods. Participants also gained encouragement and inspiration through discussions that are expected to revolutionize agricultural support, extension and sustainable agricultural systems in the region.

Every meeting was attended by the Director General and the high-ups, the mayor, and the superiors, their presentations were also informative and enriching. The schedule was developed in such a way as to generate interest among the team members to learn more for enhancement of the capacity of the members.

3.23 SAARC Agriculture PhD Program Progress Sharing Meeting

On 26th June 2023 SAARC Agriculture Centre (SAC) virtually organized a progress sharing meeting of SAARC PhD Scholarship holders. The technical Session Chaired by Dr. Grinson George, Head, Marine Biodiversity and Environment Management Division, CMFRI, The ICAR-Central Marine Fisheries Research Institute and the former Senior Programme Specialist (Fisheries), SAC. Four scholars, such as Dr. Sawjanya Lakhsmi and Mr. Anas K.K. of India, Mr. Ankur Poudel of Nepal and Mr. Aruna Maheepala of Sri Lanka presented the progress of their research projects.

SAC has initiated a flagship program on SAARC PhD Scholarship since 2017 to support early career National Agricultural Research Systems Scientists of the SAARC region to pursue PhD in reputed Agricultural Universities of South Asia. A total of 6 fellows of different SAARC Member States have already been awarded this PhD Scholarship.

3.24 Advancing Nutrition Security: Insight from the SAARC Agriculture Centre and Welthungerhilfe Regional Consultation Meeting.

SAARC Agriculture Centre (SAC) and Welthungerhilfe (WHH) collaborated to organize a Regional Consultation Meeting titled "Promoting Nutrition-Sensitive Agriculture for Improving Nutrition Security and Health of Smallholders in South Asia" in Kathmandu, Nepal on 11-12 July 2023. This event brought together key stakeholders, including government officials, representatives from SAARC member states, and personnel from WHH and its collaborative partners, to collectively address the challenges faced by smallholder farmers in the region.



Regional Consultation Meeting "Promoting Nutrition-Sensitive Agriculture for Improving Nutrition Security and Health of Smallholders in South Asia" in Kathmandu,

During the consultation meeting, insights were shared, shedding light on the specific challenges faced by each country. Bangladesh, India, and Nepal presented their country situations, highlighting issues such as poor coordination among stakeholders, limited food variety, micronutrient deficiencies, and the prevalence of non-communicable diseases (NCDs). These challenges necessitate a shift from mainstream agricultural practices, such as monoculture and mechanization, to diversified, localized, and farmer-led strategies.

Furthermore, the economic significance of agriculture cannot be understated. In Nepal, for example, agriculture accounts for 24.12% of the GDP and provides employment opportunities for a significant portion of the labor market. This underscores the crucial role agriculture plays in ensuring economic stability and livelihoods. By investing in nutrition-sensitive agriculture, governments can not only improve food security but also contribute to the overall economic development.

The regional consultation meeting showcased the Nutrition Smart Community project, which operates in vulnerable villages across Bangladesh, India, and Nepal. This comprehensive initiative integrates agriculture, natural resource management, institution building, nutrition education, and access to government food and nutrition programs. By adopting this integrated approach, stakeholders can achieve nutrition security and improve the health of smallholders in the region.



25 Livelihood Enhancement Project, Assessment of Project Outcomes

A delegation from the SAARC Agriculture Centre (SAC), led by Dr. Md. Baktear Hossain, Director, SAC accompanied by the project coordination Dr. Md. Younus Ali visited the project implementing site in Tamil Nadu of India during 23-24 July 2023 for assessment of the project outcomes.



Its aim was to visit the project implementing agency in India. This implementing agency i.e. MS Swaminathan Research Foundation (MSSRF) is located in Kittampur, Chennai. During their visit, the SAC delegates had the opportunity to closely observe the activities and achievements of the Project in India. One of the notable aspects highlighted during the visit was the production of Moringa powder and tablets, as well as oil extraction of coconut, peanut and sesame. Moreover, the MSSRF has been instrumental in popularizing these products.



As part of the visit, the delegates also visited the commercial Moringa field in Kittampur, Chennai to witnessing firsthand the impact of the project on the ground. The visit underscored the potential of small scale agro-businesses to uplift the communities across the SAARC region.

3.26 Asia –Pacific Right to Food and Agrifood System Conference (APRAC)

Dr Ganga Dutta Acharya, Senior Program Specialist (PSDP) and Dr Sikander Khan Tanveer Senior Program Specialist (Crops) participated in a two - day Asia – Pacific Right to Food and Agrifood System Conference (APRAC) which was arranged at Dhaka University Bangladesh. In this conference, a lot number of participants and delegates from the Asia and Pacific region participated. This conference became a forum for people from all walks of life, in particular small - scale food producers, farmers groups, CSOs, researchers, academia, and policymakers to navigate the future course of the agrifood system in line with the realization of the right to food and nutrition in the Asia



–Pacific region. This event was attended in person and virtually by 633 individuals and 101 organizations from Asia and the Pacific region. Dr Ganga Dutta Acharya, Senior Programme Specialist (PSPD) gave a presentation “Achieving Zero Hunger Goal in South Asia, while Dr Sikander Khan Tanveer, Senior Programme Specialist (Crops) participated as a Penalsit regarding “Future Trajectory of Agroecology in Agrifood System and its Governance”, in this event.

3.27 Livestock Expert of SAC Attended at Biosecurity Meeting at China



Dr. Md. Younus Ali, the livestock expert at SAARC Agriculture Centre (SAC), participated in the 8th Standing Group Expert-African Swine Flu for Asia and the Pacific which was held on 27-28 July 2023 in Qingdao, China organized by FAO and WOHA. The meeting convened to address the critical issues of 'biosecurity reinforcement' aiming to discuss and explore potential national and regional reinforcement against African Swine Flu (ASF). With a primary focus on exploring avenues for enhancing national and regional biosecurity measures, experts gathered to deliberate on strategies to combat ASF effectively. The discussions encompassed various efforts undertaken at the country level to improve biosecurity and minimize the impact of ASF. In his presentation Dr. Ali provided insights into the biosecurity measures implemented within the SAARC region to prevent the spread of ASF. His contribution highlighted the proactive steps taken to safeguard the South Asian region from this agricultural threat.



3.28 Empowering SAARC Member Countries for Climate Smart Agriculture

This training program was arranged by IRRI and SAC to bring together policymakers, researchers, practitioners, and innovators from across South Asia to share knowledge, experiences, and best practices in climate-smart agriculture.



SAARC Agriculture Centre (SAC) and International Rice Research Institute (IRRI) organized this four day training program for SAARC member countries on Climate Smart Agriculture in South Asia: Technologies, Policies, and Digital Innovation. The training program was organized from 25 to 28 July 2023 at the IRRI South Asia Regional Centre in Varanasi, Uttar Pradesh. 28 senior government officials from Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka participated in this training program.

SAC and IRRI have partnered to organize the SAARC Regional Climate Smart Agriculture and the CGIAR Initiative on Digital Innovation training program which is part of the Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCSeS) project, said Dr. Md. Baktear Hossain, Director, SAC.

Director SAC, at the inaugural session of the training program said that SAC is continuously striving towards strengthening the knowledge of the agricultural community towards the adoption of climate-smart agricultural practices and said that he is delighted to be partnering with IRRI for realizing these goals. He said that Climate-smart agriculture is the need of the hour, especially for South Asian countries where the increasing number of climate stresses are becoming more frequent and are adversely affecting farmers, especially the smallholder and women farmers”.



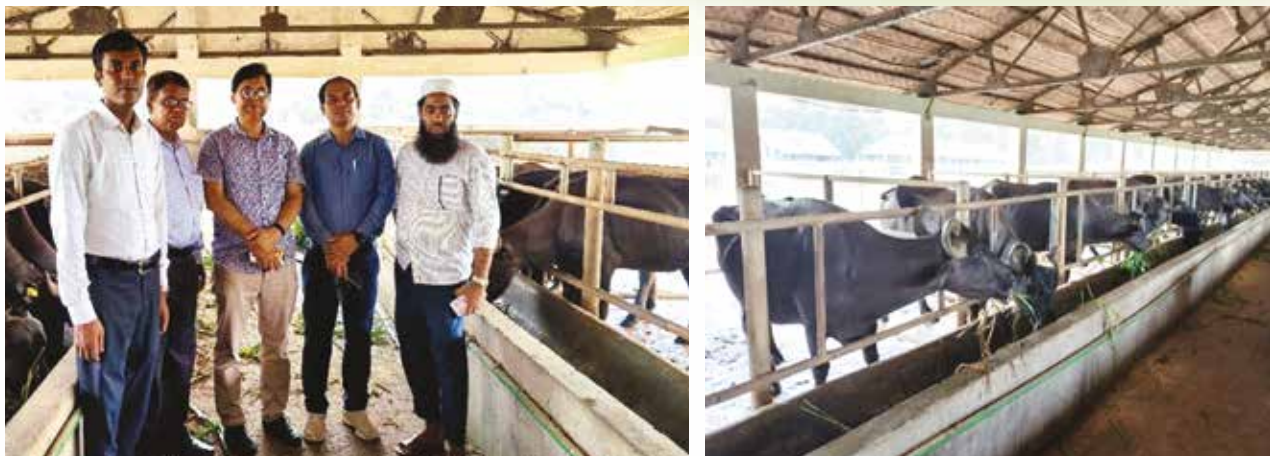
Dr. Suresh Kumar Chaudhari, DDG – Natural Resource Management, ICAR Congratulated IRRI and SAC and emphasized the multitude of climate-resilient agricultural practices. He said, “Adopting sustainable measures for farming should be a global practice. He said that it is important to prioritize resource optimization in terms of fertilizer use and laying some ground rules for greenhouse gas emissions. Training covered sessions on different climate-smart agriculture technologies and it also included discussions on building climate-resilient agriculture through adaptation and soil centric mitigation strategies and practising of conservation agriculture practices and optimizing these techniques for use by the farmers. Training also covered digital innovation with a focus on digital agriculture, precision agriculture, water stress management related to digital agriculture, use of IRRI’s proprietary app Rice Wheat Crop Manager and measurement of sensor-based soil health management, AgriGIS, etc. Training also covered discussions on knowledge management and sharing and development of youth and entrepreneurship with regard to climate-smart agriculture, etc. During the training program interactions with progressive farmers were also planned, along with a visit to the Indian Institute of Vegetable Research.

Dr. Sheetal Sharma, who is leading the CGIAR Digital Innovation Initiative from IRRI said, “Technologies, policies, and digital innovation have a crucial role to play in our collective efforts towards climate-smart agriculture. She said that cutting-edge technological advancements, such as precision farming, remote sensing, and data analytics, can enhance agricultural productivity while minimizing environmental impacts.



SAARC Agriculture Centre (SAC) and International Rice Research Institute (IRRI) organized this four day training program for SAARC member countries on Climate Smart Agriculture in South Asia: Technologies, Policies, and Digital Innovation.

3.29 SAC team visited National Buffalo Breeding Farm at Bagerhat



SAARC Agriculture Centre team comprising of Dr. Md. Baktear Hossain, Director SAC and Dr. Younus Ali, Senior Programme Specialist (livestock) visited National Buffalo Breeding Farm, Bagerhat, on 1-3 September 2023 to assess the performance of Nili Ravi buffalo calves born through artificial insemination of pedigreed buffalo semen under the initiative on “High Yielding Dairy Breed Development in SAARC Countries”.

About 33 calves were born during the period of 2018 as a result of successful artificial insemination of she-buffaloes. Out of the 33 calves, twenty-eight are surviving. The birth weight of new borne calves’ ranges from 25 to 41 kg; with an average body weight of 33.6 ± 1.63 kg. Out of those calves born, eighteen (18) were male and seventeen (17) were female, representing 50% male and 50% female. Considering the male calves only, the average birth weight was 36.28 kg, while it was 31.25 kg in case of female buffalo calves. All the calves born through artificial insemination sound healthy and were growing well with the dietary schedule adopted by the management of the farm. The mature body weight of the buffalo was found around 400 kg. The male calves were sold out in the local areas

and these are mainly being used for breeding purpose. Only few calves were also sold at community level that buffalo’s performance were found higher than farm level. It was reported that the milk production of first generation of Nili Ravi Buffalo was found 5-8 litter, and second generation was 8-12 liter. The calf mortality was found 10% at farm level. It was also informed that in future, the management of farms is thinking to ensure green fodder availability to the entire stock for better health and reproductive performance of the buffaloes. Director of DLS Khulna Division in his discussion also told that since Murrah breed is well adapted in Bangladesh climatic condition, so the Government of Bangladesh is thinking to introduce to develop high yielding dairy buffalo in Bangladesh.

It was also told by SAARC Agriculture Centre team that it will take initiative to provide the germplasm of Murrah Buffalo breed with the consideration of the Member States demand under the Materials transfer agreement of SAARC to SAARC Member States.

3.30 Asia-Pacific Quadripartite One Health Workshop

Dr. Md. Younus Ali, Senior Programme Specialist (Livestock) joined the Asia-Pacific Quadripartite One Health Workshop was conducted at hotel Bangkok Marriott Marquis on 5-8 September 2023, Thailand. The meeting was jointly organized by the World Health Organization, Food and Agricultural Organization (FAO) of the United Nations, World Organization for Animal Health, and UN Environment Programme to raise awareness about the One Health approach (human, animal, wildlife and environment interface), the OHJPA and Implementation Guide and review the progress and challenges in terms of One Health coordination, take stock of current situation and plan a harmonized way forward.



Asia-Pacific Quadripartite One Health Workshop

One Health is an integrated approach for preventing and mitigating health threats at the human-animal-plant-environment interface with the objective of achieving public health, animal health, food and nutrition security, sustainable ecosystem management and fair-trade facilitation. In the face of unprecedented challenges, it is imperative to adopt holistic and collaborative approaches, as in One Health, which integrates knowledge from various disciplines and engages stakeholders across all sectors. During the past years, One Health has been increasingly adopted at the global, regional and national levels. Considering the complexity of health threats, mitigating health risk can only be dealt with by multisectoral collaboration through a good health system. Integrated approaches that prioritize the health of our environment, promote sustainable agriculture, and enhance the resilience of human and animal populations can help mitigate the impacts of climate change, protect biodiversity, reduce pollution, better management and minimize waste, and ensure food security for present and future generations.

3.31 SAC Hosts Coordination Meeting for Small Farmer’s Livelihood Enhancement Project



On 21 September 2023, the SDF funded Livelihood Enhancement project organized its 3rd quarterly Coordination Meeting of 2023 in virtual mode. Dr. Md. Younus Ali, Project coordinator and the Senior Programme Specialist (Livestock) section at SAC chaired the meeting, while Dr. Md. Baktar Hossain, the director, SAC, attended as the Chief Guest. Country Focal Persons from the Implementing Agencies of the Project joined virtually and presented the progress, challenges and way forward for the project in their respective countries.

3.32 Empowering Small Farmer: Insights from SDF funded Livelihood Enhancement Project

A stakeholders' workshop titled "Small Scale Agro-business: Focused on Value Chain Development" under the SAARC Development Funded Livelihood Enhancement project of the SAARC Agriculture Centre (SAC) was held on 26 September, 2023 at the SAARC Agriculture Centre. With a focus on innovative approaches and sustainable practices, stakeholders from various sectors convened to exchange knowledge and strategies for agricultural development.



The workshop, conducted in a hybrid format, witnessed active participation from both virtual and physical attendees. Dr.Md. Younus Ali, Project Coordinator of the Livelihood Enhancement project and Senior Programme Specialist (Livestock) at the SAC, set the tone with warm greetings and gratitude to all participants. Following the inaugural session, Dr. Nasreen Sultana, SPS (Horticulture) at SAC, conducted the technical session. Approximately 40 participants from various organizations, including the Department of Agriculture Extension, Bangladesh Agricultural Research Institute (BARI), Bangladesh Rice Research Institute (BRRI), Hortex Foundation, Universities, Private Sector Stakeholders, local and international Non-Government Organizations, and focal points of Implementing Agencies (IA) of the project, participated in the workshop. Three invited speakers, gave their presentations on different aspects during the technical session. Distinguished speaker Professor Dr. Md. Gulzarul Aziz, from the Department of Food Processing and Rural Industries at Bangladesh Agriculture University, Mymensingh illuminated critical aspects of agro processing and value addition. Professor Aziz underscored the role of agro processing in improving the livelihoods of small-scale farmers in South Asia. His insights into technological advancements and market linkages provided valuable guidance for sustainable agro business models.

The second speaker, Dr. Md. Golam Ferdous Chowdhury, Senior Scientific Officer at the Post Harvest Technology Division of BARI, gave his presentation regarding "Introduction of Vacuum Frying Technology for Value Addition of Agricultural Produce". Similarly Dr. Ferdous highlighted the benefits of vacuum frying and proposed measures to address challenges and seize opportunities in agro processing.

Dr. Monirul Islam, Deputy Director of Rural Development Academy, Bogura, and Focal point of IA Bangladesh, shed insights into the achievements, challenges, and the way forward for Livelihood Enhancement Project. His presentation outlined the project's impact on poverty reduction, on coming generation and capacity building for small farmers.

The workshop fostered informed discussions on various topics, including flavoring techniques, oil quality and concerns, technological innovations, and women's empowerment. Participants exchanged ideas and recommendations, emphasizing the importance of sustainable practices, capacity building, and stakeholder collaboration. The workshop concluded with a focus on sustainability measures and future directions for agro-business development, Recommendations including the establishment of commercial production lines, replication of successful models, and partnership with public-private stakeholders. Dr. Md. Baktear Hossain, Director, SAC, expressed gratitude to all participants for their valuable contribution and active engagement. He emphasized the importance of workshop's role in fostering collaboration, learning, and innovation to achieve sustainable agricultural development goals.

3.33 Training of the scientists, staff of agriculture Extension Department & Farmers under C-SUCSeS project in Pakistan

A two days (10-11 October 2023) training program on Climate Smart Agriculture Technologies & Policies was arranged under the C-SUCSeS, Project at PARC - National Agricultural Research Centre (NARC) Islamabad Pakistan.



35 participants including scientists of different institutes of PARC, officers of Adaptive Agriculture Department Gujranwala region, officers of Agriculture Extension Department of Rawalpindi Division, Agriculture officer of Agriculture Extension Department of District Kasoor, farmers of rainfed area of Pothwar and rice-wheat area of Punjab, students of Peer Meher Ali Shah Arid University (PMAS) Rawalpindi, officer of IFPRI Islamabad office and teachers of different agricultural universities including PMAS Rawalpindi and University of Sargodha participated in this training program.



Collectively 14 lectures were given on the different aspects of climate smart agricultures, which included conservation agriculture, use of latest technologies and machinery, use of water saving technologies, proper nutrient management, appropriate use of pesticides and proper livestock management etc for maximum

productivity and healthy environment. Visits were arranged for the trainees to the rice crop experimental field area, Crop Sciences Institute NARC, Speed Breeding Facility of Wheat Program Crop Sciences Institute, Horticultural Research Institute, Plant Genetic Resources Institute (PGRI) and National Institute of Biotechnology & Genetics Engineering (NIGAB), where they were given briefings by the concerned scientists about their different on going research and development activities.

It can be hoped that this training will be helpful in the promotion climate smart agriculture technologies in Pakistan. These technologies will be helpful in improving the soil health, and similarly will save water and nutrients. These technologies will reduce the cost of production and will improve farmer's economic condition.

3.34 First project steering committee (PSC) meeting of the C-SUCSeS' project at Kandy in Sri Lanka

SAARC agricultural delegates have stressed advancing climate-smart agriculture aiming to cope with adverse impacts of climate change in the South Asia region. The SAARC Agriculture Centre (SAC) and International Food and Policy Research (IFPRI) jointly organized the first project steering committee (PSC) meeting of the 'Consortium for Scaling-up Climate Smart Agriculture in South Asia (C-SUCSeS)' project and the Policy Roundtable from October 27 to 29, 2023, at Kandy in Sri Lanka.



The PSC meeting brought together a high-level delegation from SAARC member states of Bangladesh, Bhutan, India, Nepal, Sri Lanka, and Pakistan. The meeting was chaired by Dr Shaikh Mohammad Bokhtiar, Executive Chairman of Bangladesh Agriculture Research Council, and co-chaired by Dr Md Baktear Hossain, Director of SAARC Agriculture Centre. The inaugural session of the meeting was graced by Agriculture Minister of Sri Lanka Mahinda Amaraweera and he also launched the 'Network of Climate Smart Agriculture in South Asia: Community of Practice (CoP)' and unveiled six books on 'Climate Smart Agriculture Technologies and Practices' produced by the SAARC member states. The minister highly appreciated the contributions of the project in building climate-resilient farming communities in South Asia to further sustainable agricultural production. He said climate-smart agriculture is a collective effort and we need the involvement of all stakeholders from farmers and agricultural associations to researchers, policymakers and international organizations. "Together, we can create a more sustainable and resilient agricultural sector," he said, adding that the network of CSA will pave the way to share and exchange knowledge, establish collaboration and communication, build professional capacity and explore innovative

ideas on CSA to combat climate change impact. Dr Baktar Hossain said C-SUCSeS Project is a pioneering initiative aimed at scaling up climate-smart agriculture practices in South Asian countries.



He added that the project places great importance on collaboration, knowledge-sharing, and innovation. In this spirit, the project is proud to introduce an online network that will serve as a platform for stakeholders, experts, and enthusiasts to share knowledge, research, and experiences related to climate-smart agriculture.

Speaking on the occasion, Director General of Agriculture Department in Sri Lanka, P Malathy, said: “We must continuously seek new and improved practices, ones that not only reduce our environmental impact but also increase our agricultural yields and enhance the well-being of our farming communities. This is the essence of the C-SUCSeS Project”.

Director of SAARC Secretariat Jamal Uddin Ahmed commented that “the event is a testament to the commitment of SAARC Leaders to promote CSA technologies in South Asia. This multi-country project is the first of its kind in the region, coming at a time when climate change has emerged as a significant threat to the agricultural landscape.”



IFPRI Research Coordinator Dr Mamata Pradhan said, “CSA as an approach is not entirely new. Over the years our farmers have been sharing their CSA insights as they adapted to changing weather patterns. But there is a need to develop and scale-up resilience and adaptability, when it comes to environment and climate

change for the countries in this region to ensure achievement of food and livelihood security.”

Dr Sheikh Mohammad Bakhtiar said South Asia is home to 25 percent of the world’s population and occupies only 4 percent of the world’s land. “COVID-19, the Russia-Ukraine War, and the immense negative impact of climate change remind us of the critical importance of agriculture and how it is affected by climate change,” he said. He emphasised the importance of the consortium and its focus on prioritising climate-smart agriculture (CSA). “Currently, there is no other consortium like this. Therefore, we must ensure its success in the battle against climate change,” he added.

The roundtable has brought together policymakers, scientists, researchers, extension agents, farmers’ representatives and private sector delegates from Bangladesh, Bhutan, India, the Maldives, Nepal, Sri Lanka and Pakistan. This roundtable dedicated to understanding of CSA in the South Asia context and exploring strategies, and programmatic approaches aimed at scaling up the adoption of Climate-Smart Agriculture (CSA) technologies by smallholder and women farmers in South Asia.

3.35 SAC Participated in the 10th TAP Partner Assembly



After becoming the member of TAP, SAC participated for the first time to the 10th annual TAP Partner Assembly took place from November 21 to 23, 2023, in Addis Ababa, Ethiopia. Participants, including partners and key stakeholders, convened for three days to exchange knowledge and learn about the Tropical Agriculture Platform's (TAP) role in addressing agrifood system challenges in low and middle-income countries. This year's theme, "Strengthening Capacities to Innovate toward Agri Food System Transformation," emphasized introducing innovative approaches to meet the needs of small farmers and enhance community resilience in the face of climate change.

3.36 SAC Governing Board Meeting in Colombo, Sri Lanka



SAC Governing Board Meeting was held in Colombo, Sri Lanka on November 15-16, 2023. GB members representing SAARC Secretariat Kathmandu, and member countries-Bangladesh, India, Maldives and Sri Lanka attended the meeting in person, while the members from Bhutan, Nepal and Pakistan joined the meeting in virtual platform. The two days-long meeting was conducted under the chairmanship of newly elected GB chair Dr Aminath Safia, from Maldives. The meeting thoroughly reviewed the progress of program activities conducted by the Centre in the immediate past and current fiscal years. Similarly, the meeting endorsed the Centre's regular programs and 20 different need-based programs for the year 2024.

3.37 Dr. Ganga Dutta Acharya, SPS (PSPD), SAC, delivered a presentation in a CIRDAP program.

On 25th November, 2023, Dr. Ganga Dutta Acharya, SPS (PSPD), SAC, gave a presentation on "Regional Economic Integration for Rural Development and Disaster Management: South Asian Perspective"- in an International Training cum Seminar organized by The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) in Dhaka.



3.38 SAARC Agriculture Centre Celebrates the 39th SAARC Chartered Day 2023



The SAARC Agriculture Centre (SAC) of the South Asian Association for Regional Cooperation (SAARC) organized a momentous occasion joyfully to mark the 39th SAARC Chartered Day at the esteemed BARC complex in Dhaka, Bangladesh, on December 10, 2023. This celebration brought together High Commissioners and Ambassadors from SAARC Member States, high-ranking government officials, senior scientists, development partners, experts, media representatives, and other stakeholders in a collective reflection on the journey of regional cooperation in agriculture and allied discipline. Honorable guests ceremoniously hosted Member States' flags and released doves, symbolizing a collective commitment to peace and cooperation.

Ms. Wahida Akter, Secretary, Ministry of Agriculture, Government of Bangladesh graced the occasion as the Chief Guest. HE Ambassador Abdul Motaleb Sarker, Director General (SAARC and BIMSTEC), Ministry of Foreign Affairs of the People's Republic of Bangladesh joined as the Special Guest. Dr. Sheikh Mohammad Bakhtiar, Executive Chairman of Bangladesh Agricultural Research Council (BARC), chaired the event with distinction, embodying the commitment to regional collaboration.

The Director of SAC, Dr. Md. Baktear Hossain, opened the festivities with a warm welcome, paving the way for a profound experience. Dr. Ganga Dutta Acharya, Senior Program Specialist of SAC, delivered a compelling keynote speech on "Agri-food Systems Transformation for Better Nutrition: Pathways for South Asia in Bangladesh." This discourse shed light on SAC's continuous efforts to address challenges in agriculture, livestock, and fisheries, emphasizing sustainability, food security, and consumer well-being.

Chief Guest, Mrs. Wahida Akter in her speech, emphasized the pivotal role of agriculture in the region, supporting over 50% of livelihoods and employment, contributing 18.2% to the GDP. Acknowledging challenges such as climate change and shrinking land, she stressed the importance of knowledge management for climate-smart agriculture.



Special Guest, Dr. Abdul Motaleb Sarker, Ambassador of SAARC and BIMSTEC, expressed deep gratitude for Bangladesh's role in SAARC's establishment. He assured unwavering support from the Government of Bangladesh, underlining the importance of SAC in fostering regional success.

In the concluding speech, Dr. Sheikh Mohammad Bakhtiar highlighted SAC's programs, including the PhD program, and expressed gratitude for the appreciation from Member States. He emphasized the significance of recent events, such as the C-SUCSeS Policy Roundtable, and stressed the need for the future continuation of C-SUCSeS as the premier regional forum on Climate Smart Agriculture.

In a momentous celebration of regional collaboration and sustainable agriculture, the book "Building Climate Resilience in South Asia: A Synthesis of Climate-Smart Agriculture Technologies and Practices" was

officially launched. In a momentous celebration of regional collaboration and sustainable agriculture, the book “Building Climate Resilience in South Asia: A Synthesis of Climate-Smart Agriculture Technologies and Practices” was officially launched on this event. It was unveiled by the Honorable Secretary of Agriculture of the Government of Bangladesh, Ms. Wahida Akter, and the Ambassador, Mr. Abdul Motaleb Sarker, Director General, SAARC and BIMSTEC.



This literary milestone is the result of comprehensive inventories undertaken by the ‘Consortium for Scaling up Climate-Smart Agriculture in South Asia (C-SUCSeS) project of the SAARC Agriculture Centre (SAC) in 2022. Spanning across the diverse landscapes of Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka, the book serves as a synthesis, amalgamating insights from individual publications on Climate-Smart Agriculture (CSA) in the region.

Categorizing technologies into five key areas, the synthesis addresses the overarching goal of seamlessly integrating climate adaptation and mitigation strategies into agricultural practices. Its primary focus is to safeguard the pillars of food, nutrition, and livelihood security in the face of a changing climate. The book not only provides a comprehensive overview of agriculture in the SAARC member countries but also dives into the nuanced challenges and opportunities arising from climate change, offering a distinctly South Asian perspective on CSA.



According to the Director of SAC, Dr. Md. Baktear Hossain, this book aims to provide a holistic understanding of the region's vulnerabilities and innovative approaches to building climate-resilient farming communities in the region.

The SAARC Charter Day launch event was not only a platform for the official introduction of this seminal work but also an occasion to highlight its potential impact on the region's agricultural landscape. With detailed policy recommendations, the synthesis emerges as a valuable resource, poised to foster regional cooperation and facilitate the widespread adoption of CSA technologies tailored to the unique environmental and climatic conditions of South Asia.

The Member States of the SAARC signed the charter on December 8, 1985, during the inaugural Summit meeting in Dhaka. This visionary document set the stage for collaborative endeavors to ensure livelihoods, food security, and nutritional well-being in South Asia.

3.39 SAC bids Farewell to out going Director SAC



SAC arranged a farewell party on 17th December 2023 for Dr Md. Baktear Hossain, who has served as a 11th Director SAARC Agriculture Centre for the period of 3 years. During his farewell speech, Dr Md. Baktear Hossain, expressed his gratitude for the opportunity to serve as the Director SAC, highlighting that his tenure at the centre has been the best part of his life. He thanked all his former colleagues.

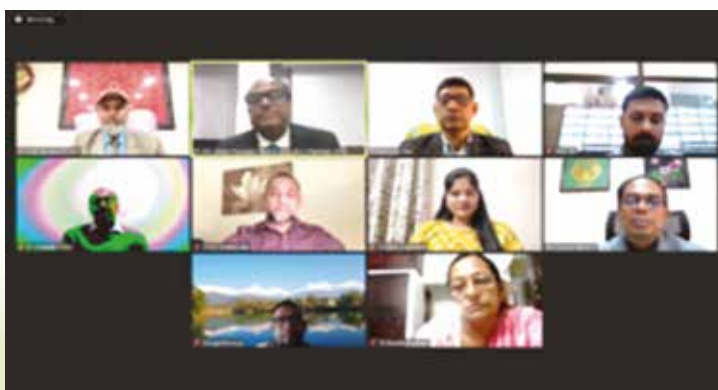
3.40 SAC bids Welcome to new Director SAC



Dr Md. Harunur Rashid, the Chief Scientific Officer of Crop Division of Bangladesh Agricultural Research Council (BARC) and former Director NATP2 PIU and distinguish figure in the field of agricultural research and policy joined as Director, SAARC Agriculture Centre on 17th December. As an IRRI scholar, Dr Rashid obtained, PhD from Bangladesh Agricultural University. With 27 years of his career, Dr Rashid has demonstrated exceptional expertise as a crop systems specialist, policy researcher, skilled participatory trainer. He has played a pivotal role in various organizations, contributing significantly to the advancement of agricultural technology and policy formation. He has served as in Bangladesh Rice Research Institute (BRI), as Senior Scientific Officer and similarly he has also worked in IRRI in PETRA project. He has also served in the National Academy for Primary Education as Assistant Specialist / Instructor. He has authored numerous publications in national and international peer reviewed journals, wrote several books chapters and popular articles.

3.41 Review of PhD Scholars of SAARC Agriculture Centre (SAC) funded PhD scholarship project.

SAARC PhD Progress Meeting was held on 27th December 2023 in virtual mode by SAARC Agriculture Centre (SAC).



The meeting started with a hearty greeting to all the fellows. Dr. Md. Younus Ali, Senior Program Specialist (Livestock), SAC delivered his warm wishes and heartfelt thanks in his welcome speech to the respected chairman and other fellows for joining the SAARC PhD Progress sharing meeting. Dr. Harunur Rashid, Director SAARC Agriculture Centre delivered an inaugural speech in the inaugural session. In his remarks, he focused on the importance of the SAARC PhD Scholarship Program and requested the fellows to complete the PhD activities within 3 years of time. After the inaugural session, the technical session was conducted under the chairmanship of Dr. Md. Abdur Razzaque, Former Executive Chairman, BARC. The total three fellows (Mr. Anas KK, Dr. Sowjanya Lakshmi and Mr Aruna Maheepala) of the SAARC PhD program presented the progress activities. The above fellows are pursuing their PhD at ICAR-CIFT, India, ICAR-IVRI, India and PGIA, Peradeniya, Sri Lanka. A farewell ceremony of Dr. Sowjanya was held virtually. Finally, Dr. Rashid Director SAC concluded the meeting through Vote of thanks.

3.42 International Collaborations

The SAARC Agriculture Centre has been closely working with various international development partners on priority areas of agriculture and allied sectors for regional development, which continued in the year 2023 also. Some of the key collaborative partner organizations of the Centre are as under:

- International Rice Research Institute (IRRI)
- Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP)
- World Agro-forestry Centre (WAC)
- Food and Agriculture Organization (FAO) of the United Nations
- International Centre for Integrated Mountain Development (ICIMOD)
- International Food Policy Research Institute (IFPRI)
- International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
- International Sericulture Commission (ISC)
- SAARC Development Fund (SDF)
- Asia-Pacific Association of Agricultural Research Institutes (APAARI)
- Global Forum on Agricultural Research (GFAR)
- International Livestock Research Institute (ILRI)
- International Maize and Wheat Improvement Centre (CIMMYT)
- Asian Farmers' Association (AFA)
- ActionAid International
- Commonwealth Veterinary Association (CVA)
- Welthungerhilfe
- Tropical Agriculture Platform (TAP)

Along with those, following international agencies have also been approached with collaborative action proposals and the Memorandum of Understanding (MoU) for the same have been forwarded for consideration.

- International Livestock Research Institute (ILRI)
- Yunnan Academy of Agricultural Sciences (YAAS)
- The World Vegetable Center (WorldVeg)
- Intern Postgraduate Institute of Agriculture, University of Peradeniya (UoP-PGIA)
- International Food Policy Research Institute (IFPRI)
- Indian Council for Agriculture Research (ICAR)
- International Centre for Integrated Mountain Development (ICIMOD)

Need Based Programmes

As Governing Board meeting of SAARC Member States, was not conducted during the year 2022, so no Need based programmes were arranged.

SAC Projects



1. Livelihood Enhancement of the Small Farmers in SAARC Region through Small Scale Agro-business focusing on Value Chain Development

Progress of the project:

As recommended by the Third Meeting of the SAARC Agriculture Ministers (Dhaka, 7 April 2016), the 28th Meeting of the SAARC Development Fund (SDF) Board of Directors (Thimphu, 20-22 December 2017) approved SAC's project on "Livelihood enhancement of small farmers in SAARC region through small agro-business focusing on value chain development" amounting to about US \$ 2 million for two years. A Project Inception Meeting was held in Bhutan on 26-27 November 2018, which was attended by six implementing agencies of the Member States, including SAC. Six Member States (Bangladesh, Bhutan, India, Maldives, Pakistan and Sri Lanka) including SAC, have signed the Project Financing Agreement. Later, IA Pakistan could not able to continue the project due to their administrative complexity. The above-mentioned Member States including SAC have been implementing the project successfully since 2018. Meanwhile, SDF has disbursed about US \$ 595000.00 up to June 2023 to SAC, Rural Development Academy (RDA) of Bangladesh, Department of Agriculture (DoA) of Bhutan, M.S. Swaminathan Research Foundation of India, Ministry of Fisheries, Marine Resources and Agriculture of Maldives and Department of Agriculture (DoA) of Sri Lanka for the project activities. Up to December 2023, SAC Received USD 84907.00 from SDF and cumulative expenditure was 79,000 USD (burnt rate 93%). In 2022, IA Bangladesh had completed the project with effective manner. Now Bangladesh project farmers are continuing the project activities with their own interest. The following Member States without Bangladesh have got the third no cost time extension with the approval from the SDF board members. The total expenditure of the project is around US\$ 482374.00 (Up to June 2022). Group formation, technical training, baseline survey, machineries purchase has already been completed under this project. The implementing agencies are producing the products like Bangladesh (Chips and tomato ketchup), India (Moringa powder and capsule), Bhutan (drying fruits) and Sri Lanka (chips) as per project proposal. Machine procurement, Marketing linkage and group registration activities are in progress for the implementing agency of Maldives. SAC will conduct the endline survey of the project at the end of year with the consideration of RRF.

Sl. No.	Project Activities	Target	Achievement	%
01	Group Formation	20	20	100
02	Establishment of project infrastructure	10	08	80%
03	Procurement of Agro Processing Machine	10	08	80%
04	Capacity building (training on agro processing)	550 farmers	500	90%
05	Capacity Building for staff (Training on value chain dev. and agro -processing)	07 Batches	06	85%
06	Exposure visit to agro business / business facilities	5 Batches	03	60%
07	Registered PGOs	10	04	40%
08	Continuation of the products produced.	10	06	60%

Key Achievements:

- IA Bangladesh, Bhutan, India and IA Sri Lanka are producing the products and promotion of the products are continuing with the local market.
- Selling of the products (moringa powder and capsule) has been increased for IA India
- Marketing linkage and promotional activities are being held of IA India and IA Sri Lanka

- FPOs has been registered by the IA Bhutan and India
- Four IAs of Member States are producing chips, tomato ketchup, moringa products, coconut virgin oil, dried foods etc. with grading and packaging
- Appointed the consultants for endline survey of the project

Key Lessons Learned and Recommendations:

1. All IAs are requested to keep in loop with the focal point of SAC during submission of the fund request to SDF.
2. After submission of fund requests to SDF, all IAs are requested to keep follow up with the concerned person of SDF aimed to expedite the process.
3. All IAs are requested to expedite the planned activities of the project.
4. SDF is requested to expedite the fund release to implement the IAs activities smoothly and in time.
5. During a field visit of IA India, project farmers were found very committed and it was found that it will be helpful for the sustainability of the project.
6. Farmers of IA Sri Lanka are very much pro-active.





2. Project on “Consortium for Scaling-Up Climate Smart Agriculture in South Asia”(C-SUCSeS).

The International Fund for Agricultural Development (IFAD), SAARC Agriculture Centre (SAC), International Food Policy Research Institute (IFPRI) and SAARC Development Fund (SDF) have forged a consortium to implement a project for “Scaling-up Climate Smart Agriculture in South Asia”. The central objective of this project is to develop evidence-based strategies to collectively tackle the impact of climate change in South Asia. The project officially kicked-off from November 24, 2021, with an initial pilot investment of about USD 3.1 million provided by IFAD, SAC, IFPRI and SDF. The overarching goal of this project is to promote sustainable and resilient agricultural intensification through enhanced capacity (policy, institution, skills) to scale-up climate smart strategies and technologies. The aims of consortium is to provide support on:

- 1) Accelerating the identification and scaling-up of viable CSA interventions through national policies and programmes in South Asia.
- (2) Setting-up effective and efficient mechanisms for knowledge sharing, policy dialogue, and cooperation in R&D programmes among SAARC countries on CSA.

The expected outcomes of the project include:

- (i) CSA policies and strategies are mainstreamed in national agricultural development strategies with

appropriate institutional arrangement for effective implementation.

- (ii) Enhanced capacities of approximately 2500 national staffs (policy, research and extension system) on climate smart agricultural technologies and sustainable and resilient agricultural intensification.
- (iii) Around 5000 demonstration sites adopting the CSA technologies and best practices; and
- (iv) Enhanced SAC-led cooperation programme on CSA in the SAARC region.

During the year 2023, the overall implementation of the C-SUCSeS project went on effectively and smoothly. Through the implementation of the project, three key opportunities emerged viz. enhancing regional cooperation with effective coordination, creating capacity-building platforms and emerging critical roles of local service providers in scaling up climate-smart agriculture technologies.

Implementing knowledge management activities of the project created opportunities for member countries to build the capacity of agricultural professionals and smallholder farmers within their countries as well as at the regional level. The member states have conducted several trainings and awareness programs on CSA thereby building capacity in the agriculture sector. Further, the project created platforms for training, workshops, and exposure visits at the regional level thereby building the capacity and providing opportunities for professionals and farmers to exchange knowledge and experiences among themselves. Without the support of this regional project, the opportunity to build the capacity of the agriculture sector at the national level and exposure and training of the professionals and farmers at the regional level would not have been possible.

An attractive opportunity that emerged with the implementation of the project is the need for local service providers (LSP) to scale up CSA technologies in the member states. As the scaling up of CSA technologies progresses in the project areas, the need for LSP increases creating opportunities for new LSPs to cope with the local demand. In Bangladesh and Nepal, LSPs are recruiting school dropout youths with them to provide services to the farmers for scaling up CSA technologies. Gradually, these youth are striving to become full-fledged LSPs which is one of the encouraging signs of the scaling-up process. However, youth need initial support from the project or national governments to procure agricultural machinery for use in scaling up CSA technologies in their localities.

2.1. Inventory of Climate Smart Agriculture Technologies

The inventory of CSA technologies was conducted by six member states viz. Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka in 2022, and six books titled 'Climate-Smart Agriculture Technologies and Practices' of six countries were published and formally launched by His Excellency Mahinda Amaraweera, Minister of Agriculture and Plantation Industries of Sri Lanka during the Project Steering Committee and Policy Roundtable meetings on 27 October 2023 at Kandy in Sri Lanka. In addition, based on the six published books of six member states, the Project Coordination Unit (PCU) synthesized and published a book titled 'Building Climate Resilience in South Asia: A Synthesis of Climate-Smart Agriculture Technologies and Practices'. Before these publications, information



on CSA technologies was available in bits and pieces and not available in one book. With the publication of these books, respective countries could get information on CSA technologies in one book and even the information on CSA technologies in South Asia is available in this synthesized book.

2.2 Validation and viability assessment of CSA technologies through participatory research

The selection and prioritization of the CSA technologies were done in consultation with scientists, extensionists, farmers, and other stakeholders involved in the implementation of CSA technologies in early 2022. National Focal Points and their associates with technical support from IFPRI prioritized and selected

promising and women-friendly CSA technologies of their respective countries using the World Bank CSA technology index and Climate Smart Feasibility Index (CSFI) methods.

Since 2022 participatory research on prioritized CSA technologies have been carried out in three countries (Bangladesh, India, Nepal) under IFAD funding and in another three countries (Bhutan, Pakistan, Sri Lanka) under SAARC Development Fund co-financing. The project has been providing climate-resilient seed varieties, fertilizer, training, and minimal support for hiring and procurement of agricultural equipments to the farmers implementing the CSA technologies.



Participatory research aims to carry out a viability assessment of prioritized CSA technologies with smallholder farmers in all project countries and validate these technologies for adoption and scaling up by smallholder farmers, especially women farmers. The member states compiled the first-year data of the participatory research and some countries have collected second-year data and started compiling. However, some countries like Bangladesh, Pakistan, and Nepal are yet to collect the second-year data because of the winter cropping season. PCU circulated a common structure and contents of the participatory research report in 2022 to all the Member States for preparation of its reports. All member countries have been requested to start preparing the participatory reports and finalize them after the compilation of third-year data. A total of 1,387 smallholder farmers participated in participatory research of CSA technologies in six countries in 2023 and the cumulative number of farmers involved in 2022 and 2023 is 1,934 against the target beneficiaries of 1,500 farmers. Despite the limited allocation of funds for participatory research, all countries have been able to cover a substantial number of farmers. Site-specific focal officials have been continuously collecting data from CSA participatory research sites to assess the specific CSA technologies for their potential benefits, level of climate resilience, women friendliness, and scalability by smallholder farmers.

2.3 Benefit-cost analysis of CSA technologies

The benefit-cost analysis is being conducted for a prioritized group of 3-4 technologies in each member country. The technologies have been prioritized by using the World Bank (WB) CSA technology index methodology and the same set of technologies have been upscaled by the NFPs as part of the participatory research.

Of the six countries, detailed cost-benefit data have been received from Bangladesh and Pakistan. The cost-benefit analysis for these two countries is completed and the report on BC ratios is prepared accordingly. Sri Lanka, Nepal, and Bhutan have initiated data collection in the last quarter of 2023. During the policy roundtable meeting in October 2023 in Sri Lanka, IFPRI again provided the questionnaire along with assistance with data collection. It is expected that the data from these three countries will be received in early 2024 to enable the analysis of these countries. The results from Bangladesh were shared in the project steering committee (PSC) meeting in October 2023.

2.4 Policy analysis / advocacy and institutional development

One of the major constraints in scaling up CSA technologies and practices in the region is the inadequate policy support and weak institutions underpinning CSA. Under this component, policy and institutional constraints leading to the rapid diffusion of proven CSA technologies and practices in South Asia are being

studied. Based on these studies, a set of policy papers outlining policy and institutional constraints to scaling up selected CSA technologies will be produced. This in turn will help to design policies and institutional arrangements better to promote equitable access to and adoption of such technologies in the region. The regional cooperation strategy for scaling up CSA technologies and practices across the South Asian region will also be developed. Moreover, a roundtable meeting for sharing experiences, evidence, and discussion of practical policies, strategies, and programmatic approaches to enhance the adoption of CSA technologies was organized.

2.5 Analyze policy and institutional constraints to support scaling up of CSA technologies

As per the discussions with the IFAD mission team in October 2023, the work on activities i.e. To develop strategies for scaling up promising CSA technologies and Analyze policy and institutional constraints to support scaling up CSA technologies have been combined due to their interrelated nature. Accordingly, the analysis of constraints and development of strategies towards scaling up is being carried out while considering the interlinkages between them. Field visits have been done by IFPRI researchers in all the member countries and had focused group discussions with NARES, farmers, and scientists to discuss the key challenges and strategies for scaling up CSA technologies in the countries. In addition, the existing policies are analyzed at the country level to explore the potential scope of synergies between these policies and the prioritized technologies.

For instance, solar-powered pumping (one of the prioritized technologies in Sri Lanka) also finds a place in the nationally determined contributions (NDCs) of Sri Lanka. Similarly, the Bangladesh government is committed to increasing the area under the alternate wetting and drying (AWD) rice. These opportunities can provide a significant impetus to the upscaling of prioritized technologies. The initial drafts have been prepared for Bangladesh, Sri Lanka, and Nepal and the remaining will be completed in 2024.

2.6 Develop a regional strategy and programme to support scaling up CSA technologies

The work under this component is slightly delayed due to the withdrawal of the Consultant who was engaged by IFPRI in 2023. As a result, a new consultant was looked at and finalized in December 2023. The work under this component for Bangladesh has been initialized and the initial draft is ready. For the other countries, the consultant's timeline indicates the completion by the third quarter of 2024.

2.7 Roundtable meeting with NARES, community-based and apex farmer organizations at Kandy, Sri Lanka



The Department of Agriculture, Sri Lanka in collaboration with the SAARC Agriculture Centre and International Food Policy Research Institute organized a roundtable meeting on 28 - 29 October 2023 at Kandy. Its main aim was to provide a platform for knowledge sharing and exchange on the latest research and development in CSA technologies and practices, as well as the challenges and opportunities for scaling up the adoption of these technologies among smallholder farmers in South Asia. The meeting facilitated discussions on various policy strategies and programmatic approaches that can support the scaling-up of CSA technologies and practices, with a focus on enhancing the capacity of smallholder farmers to adopt and benefit from them. It also explored opportunities for collaboration and partnership among different stakeholders, including civil society organizations, research centers, apex farmers' organizations, and private sector organizations, to promote innovation, investment, and knowledge-sharing in climate-smart agriculture.

The meeting was well designed and deliberated extensively in a highly professional manner and several recommendations emerged from the meeting. A total of 52 participants from seven SAARC member states, international organizations, the Asian Farmer Association, non-governmental organizations, smallholder farmers, and experts participated actively in the meeting.

2.8 Knowledge management and capacity building.

The knowledge generated by the project will play a key role in achieving the project results and impacts. One of the two objectives of the project is setting up effective and efficient mechanisms for knowledge sharing and policy dialogue among SAARC member countries on climate-smart agriculture. Moreover, knowledge management and capacity building are integral parts of the four programme outputs viz. established a well-functioning community of practice on CSA consisting of researchers, entrepreneurs, farmer organizations, donors, and policymakers; developed training materials on CSA technologies and practices; enhanced knowledge and learning of farmers, researchers, service providers, and extension agents on CSA technologies; developed knowledge sharing approaches and pilot testing with CSA community of practice.

2.9 Develop of a network of climate-smart agriculture Community of Practice.



The establishment of a well-functioning and efficient network is crucial to facilitating CSA knowledge and technology sharing among the member states and it is the key activity under the knowledge management component. A Network of Climate Smart Agriculture in South Asia: Community of Practice (COP) was established on the project's macro-site under the SAC web domain. This COP network was formally launched on 27 October 2023 by the Minister for Agriculture and Plantation Industries of Sri Lanka. It is an online forum for researchers, entrepreneurs, farmer organizations, policymakers of SAARC member states, donors, international organizations, and project partners. Comprehensive guidelines of a community of practices network members are available at https://cop.sac.org.bd/publication/2nd-publication-cop-guidelines_17-

september-2023/. Through this network, the members can get up-to-date reliable information and knowledge on CSA. For example, best practices, lessons learned, evidence, innovative ideas, experiences, experiments, challenges, success stories, and research findings of projects are shared on this network. Newspaper articles, publications, multimedia, and outreach products that are relevant to agriculture in South Asia perspective are also available on this online forum for the members. Currently, the COP is fully functional and several publications, proceedings, and articles are being shared on this forum.

2.10 Online Discussion Forum.

One online forum was conducted by IFPRI in collaboration with the Nepal Agricultural Research Council to discuss challenges and opportunities in adopting climate-smart technologies in Nepal. This forum was organized with the main aim of bringing together various stakeholders from SAARC countries and discuss climate-smart agriculture for the exchange of knowledge and experiences. Dr Tika Bahadur Karki, Senior Scientist and Chief of the National Agronomy Research Centre was the speaker of the discussion forum.

2.11 Develop training materials on CSA technologies and practices.

A total of six training modules on CSA technologies are being prepared to impart training in these technologies to farmers and also to extension officials. These modules cover technologies that are prioritized by more than one member country. The technologies are direct seeded rice (DSR), drip irrigation, protected agriculture for high-value crops, alternate wetting and drying (AWD), bed planting, and sustainable land management techniques. The work on these modules is at the final stages of completion and the modules will be ready in March 2024.

As per the AWPB, one regional training and validation of prepared CSA modules was planned in 2023 for researchers, extension agents, and other relevant stakeholders. However, this training could not be conducted as the preparation of training modules was not completed in 2023. The training is scheduled for April 2024 for all stakeholders of the project.

2.12 Exposure visits to Climate Smart Village (CSV) in Nepal to promote learning and exchange of knowledge.



An exposure visit to Nepal from 12 – 16 June 2023 was organized by the Project Coordination Unit of SAARC Agriculture Centre as it is one of the activities under the knowledge management component of the project. The objectives of the visit were to enhance the capacities of national officials and farmers responsible for scaling up CSA technologies and promote regional cooperation through the exchange of climate-smart

agriculture knowledge among the member states. Twenty participants including farmers, researchers, extension agents, and policymakers from six SAARC Member States participated in the exposure visit. They were exposed to Nepal's agriculture policies, strategies, and climate-smart agriculture programs. Moreover, participants were also exposed to climate-smart model villages at Kavre and ICIMOD's climate-smart demonstration sites, and participatory research sites for learning and exchange of knowledge on climate-smart agriculture practices.

2.13. Training on climate-smart agriculture at IRRI South Asia Regional Centre (ISARC), Varanasi, India

PCU in collaboration with the International Rice Research Institute (IRRI) conducted a regional training on climate-smart agriculture technologies and policies for SAARC countries at IRRI South Asia Regional Centre (ISARC) in Varanasi, India from 25 – 28 July 2023. This training was an important activity under the knowledge management and capacity building component. Its objectives were to enhance the capacities of member states and promote regional cooperation among the member states for scaling up climate-smart agriculture in the region.

The four-day training was highly interactive, and the trainers were all renowned and leading experts in the region. A total of 28 scientists, researchers, policymakers, extension agents, entrepreneurs, progressive farmers, and knowledge management personnel from SAARC Member States of Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka participated in this training.

A significant aspect of this training is the strong partnership between the Project Coordination Unit of the SAARC Agriculture Centre and the International Rice Research Institute. This collaboration has resulted in a well-crafted training program that enriches participants' knowledge of climate-smart agriculture, encompassing the technologies, policies, strategies, and the latest digital tools used in CSA. This training can be seen as a "Training of Trainers" (ToT), empowering participants to conduct climate-smart agriculture training in their respective countries. It is expected that the training participants will play a vital role in training agricultural professionals, smallholders, and service providers in their respective countries leading to the scaling up of CSA technologies in the region.



2.14 Develop innovative approaches to share CSA knowledge and pilot innovative knowledge-sharing strategies

Case Studies on successful CSA adoption and innovations: Two videos prepared on Resilient Intercropping from India, and DSR in Nepal. The trailers for both full-length case-study films were released in October at the Project Steering Committee and Policy Roundtable meetings. The full-length videos are in their last stage and will be ready to be taken live by the end of February 2024.

In addition, IFPRI is adopting a multi-faceted approach to showcase successful case studies. Therefore, in addition to these videos, written case studies are also promoted in the form of blogs and other similar write-ups. One such blog was published in 2023 on IFPRI's website with a link to SAC's website. It showcased the story of a female farmer in Bangladesh whose transition from conventional potato farming to climate-smart strip planting has produced a better yield and economic benefits.

Moreover, from the beginning of 2023, Bangladesh, India, and Nepal have been carrying out case studies on the promising and most successful CSA technologies to prepare study materials for extension agents and smallholder farmers. Based on the case studies of the technologies, different innovative approaches like learning routes are expected to be prepared by respective countries for rapid diffusion of CSA technologies by the end of 2024. Most of the training and learning materials of the CSA technologies are also expected to be prepared in the national language of the respective countries for rapid dissemination of the technologies.

2.15 Project's social media, articles, success stories, and videos.

Modern social media such as Facebook, Twitter (X), and LinkedIn are very effective in the swift dissemination of any kind of information to relevant stakeholders as well as to wider audiences. Recognizing the importance of social media and enhancing visibility in the region, PCU has created accounts for the C-SUCSeS project on all social media, actively updating the status of project activities and sharing all relevant information. The links to the project's social media account: <https://www.facebook.com/profile.php?id=100088472822725>; https://twitter.com/C_SUCSeS;

<https://www.linkedin.com/in/c-suceses-project-305292257/>

A total of eleven articles about the C-SUCSeS project and its success stories, one blog, and four videos have been published and uploaded on the project webpage for wider audiences as well as for the members of the online CSA Community of Practice (COP) forum. In addition, 48 posts showcasing project activities, results, and experiments were posted on social media for a wider audience. The activities of disseminating and reaching out the project information to wider audiences through different social media platforms and uploading that information on the project website are based on the knowledge management plan of the project. In addition, mainstream media in the region have published seven news articles related to the project. The project has significantly enhanced its visibility in the second year of the project because of the well-crafted knowledge management plan.

2.16 Capacity building of smallholder farmers in the Member States.

One of the key constraints in the adoption and scaling up of CSA technologies in South Asia is the lack of access to technologies and inadequate support from the governments. To increase the adoption rate and scale up CSA technologies in the region, capacity building of smallholder farmers and agricultural professionals is crucial. Despite the limited funds, the member states have been carrying out training, awareness programs, and consultation meetings on CSA technologies for the farmers since 2022. During this reporting period, the member states have conducted several capacity-building programs on the prioritized CSA technologies in their respective countries.

A total of 1,519 farmers, researchers, extension workers, and policymakers participated in the various capacity-building programs of climate-smart agriculture technologies. Out of the total of 1,519 participants, 425 women participated in the different capacity-building programs in the member states which is about 28% of the total participants. The total number of agricultural professionals who participated in the capacity building is 227 in 2023 and 149 in 2022 and the cumulative figure for two years is 376 against the target of 250 reflected in the result-based logical framework.

2.17 Project Management

Project Steering Committee Meeting:

The Project Steering Committee (PSC) Meeting is an annual event in the C-SUCSeS project's framework that plays a pivotal role in overseeing and guiding the implementation of the project. Notably, due to unforeseen

circumstances, the SAC was unable to host the PSC Meeting in 2021 and 2022. The initial PSC meeting was scheduled for December 6, 2021 (virtual) but had to be postponed due to unavoidable reasons. This year SAC conducted the first PSC Meeting of the project on 27 October 2023 in Kandy, Sri Lanka. The meeting was chaired by the Executive Chairman of the Bangladesh Agricultural Research Council Dr. Shaikh Mohammad Bokhtiar and Co-chaired by Dr. Md. Baktar Hossain, Directors of SAC. Based on the programme implementation manual, the PSC meeting has to be chaired by the Head of NARES/Department of the member states in alphabetical order of name of the countries. As such, Bangladesh chaired the first project steering committee meeting and co-chaired by SAC.

The core objectives of the PSC Meeting encompass a comprehensive review and assessment of project progress, drawing insights from monitoring and evaluation data and other relevant information sources. It serves as a pivotal platform for providing strategic guidance, approving Annual Work Plans and Budgets (AWPB), and overseeing the audit process. This PSC meeting was organized back-to-back with the policy roundtable meeting to save resources and ensure effective coordination among stakeholders of the member countries.

The PSC Meeting catalyzes collaboration among key stakeholders, including representatives from participating countries, regional bodies, and international organizations. It offers an invaluable avenue for program oversight, policy direction, exchange of insights, and cementing a way for the successful implementation of the project.

Programme Management Meeting:

SAC convened ten Programme Management Meetings (PMM) virtually between SAC-IFPRI-IFAD and SAC-Member States in accordance with the Programme Implementation Manual. These meetings were conducted to report on the project's operations, funds disbursement and expenditure, discuss issues and challenges in implementation, progress of project activities, and deliberate on planned activities of 2023. The periodic meetings of stakeholders were of paramount importance as these meetings provided common platforms for discussion about the programme management and the challenges encountered during the implementation of project activities with the multiple stakeholders. In addition, the meetings helped to resolve issues and deepened understanding of the project among the stakeholders paving the way for effective and smooth implementation of the project. Minutes of Meetings of PMM were circulated to all partners of the project and archived accordingly.



Supervision Mission and implementation support:

The supervision mission of the project was carried out by the team from IFAD and the team was assisted by officials from SAC and IFPRI from 13 – 19 October 2023. Nepal Agricultural Research Council being the implementing agency of the project coordinated the meetings, field visits to participatory research sites, and farmer consultation meetings in the districts. In addition, the team made a courtesy call to the Director, ARD & SDF of the SAARC Secretariat and briefly met with the IFAD Country Office in Nepal. Later that day the team had a meeting with the Joint Secretary of the Ministry of Agriculture and Livestock Development to discuss Nepal's policies and programs for climate-smart agriculture.

Subsequently, the team traveled to Bangladesh to meet with the implementing agency, the On-Farm Research Division of Bangladesh Agricultural Research Institute, Gazipur and the SAARC Agriculture Centre, the grant recipient of the project. A series of meetings with the Director, SAC, Chief Scientific Officer, OFRD, and farmers of participatory research sites were held to discuss the progress of the project and assess the issues and challenges faced by the implementing agency. The team made a one-day field visit to Rajshahi CSA participatory research sites to assess the ongoing research and to understand the views and opinions of the farmers adopting CSA technologies.

Conclusions and recommendations for follow-up:

The overall implementation of the C-SUCSeS project during the year 2023 went on effectively and smoothly despite having varied policies, administrative, and financial settings of the seven SAARC member states. This success is primarily attributed to the unwavering support and invaluable guidance from the Asia and the Pacific Region team of IFAD and the project steering committee members. National Focal Points of the member states have played a pivotal role in executing project activities within their respective countries and efficiently coordinated with SAC and IFPRI in delivering project outputs. IFPRI being a leading research institute in agricultural and food policy has played an important role in providing technical backstopping and policy guidance to the project which significantly contributed to the successful execution of project activities during the year 2023.

Several outputs have been delivered by the project during the reporting period of 2023. The first output is the publication of six CSA inventory books titled 'Climate-Smart Agriculture Technologies and Practices' of six countries formally launched by His Excellency Mahinda Amaraweera, Minister of Agriculture and Plantation Industries of Sri Lanka. Based on published CSA inventory books of six member states, the Project Coordination Unit (PCU) synthesized and published a book titled 'Building Climate Resilience in South Asia: A Synthesis of Climate-Smart Agriculture Technologies and Practices'. It was launched on SAARC Charter Day on 08 December 2023 by the Secretary, Ministry of Agriculture, Bangladesh. On the participatory research front, member states have collected and compiled two years of data which will be used to validate promising and successful CSA technologies at the end of the project. A total of 1,387 farmers were involved in participatory research out of which 320 were women. IFPRI is vigorously carrying out benefit-cost analysis of prioritized CSA technologies, analyzing policies, and assessing institutional constraints for scaling up CSA technologies in the member states.

Under the knowledge management component, a network of CSA Community of Practice (COP) was established on the project micro-site and made fully functional for the COP members. PCU organized an exposure visit to Nepal for different levels of stakeholders and also conducted one regional training on climate-smart agriculture and policies in collaboration with IRRI South Asia Regional Centre in Varanasi. Project steering Committee and Policy Roundtable meetings were also organized in Sri Lanka. A total of six training modules on CSA technologies are being prepared to impart training to the farmers and extension officials. Two videos were prepared on Resilient Intercropping from India and Direct Seeded Rice in Nepal. The trailers for both full-length case-study films were released in October at the PSC and Policy Roundtable meetings in Sri Lanka. Eleven articles related to climate-smart agriculture technologies were published on the project micro-site and seven.

2.18 List of Climate Smart Agriculture Technologies Prioritized by the SAARC Member States

Bangladesh

- 1) Bed planting (BP)
- 2) Integrated Nutrient Management (INM)
- 3) Zero tillage (ZT) or strip planting (ST)
- 4) Mixed or intercropping
- 5) Mulch and residue retention
- 6) Agroforestry system
- 7) Quesungual Slash and Mulch Agroforestry System (QSMAS)



Bhutan

- 1) Protected Agriculture technology
- 2) Sustainable Land Management
- 3) Automated/Smart Irrigation Technology (SIT)



India

- 1) Direct Seeded Rice
- 2) Laser Land Levelling
- 3) Broad Bed Furrow (Soybean)
- 4) Conservation Agriculture
- 5) Zero tillage
- 6) Micro irrigation (Drip) in Cotton
- 7) Plastic Mulching
- 8) Resilient intercropping system
- 9) Improved seed variety (Foxtail millet (SIA-3085))

**Nepal**

1. Crop system (DSR in Rice-wheat system + Brown manuring-Sesbania)
2. Laser land leveling
3. Alternate wetting and drying
4. Zero tillage wheat
5. Maize based intercropping
6. Drought-tolerant varieties in rice
7. Green manuring in rice
8. Flood tolerant
9. Integrated nutrient management
10. Drip irrigation
11. Raised bed planting
12. Conservation agriculture

**Pakistan**

- 1) Zero Tillage Wheat Planting in Rice-Wheat Cropping System
- 2) Direct Seeding of Rice in Rice-Wheat Cropping System
- 3) Alternate Wetting and Drying of Rice in Rice-Wheat Cropping System
- 4) Zero Tillage Happy Seeder / Pak Seeder Wheat Planting in Rice-Wheat Cropping System
- 5) Raised Beds / Ridge Planting of Wheat in Rice-Wheat Cropping System
- 6) Resilient Cropping Systems (Mungbean-Wheat, Soybean-Wheat) in Rainfed Areas
- 7) Resilient Cropping Systems (Sesbania-Wheat) in Rainfed Area
- 8) Drought-Tolerant Varieties in Rainfed Areas

**Sri Lanka**

- 1) Crop diversification - Sandwich cropping systems using short-aged legume types (third-season cultivation)
- 2) Multi-purpose soil conservation bunds
- 3) Solar-powered water pumping systems/ micro irrigation
- 4) 'Parachute' method of paddy seedling broadcasting
- 5) Protected agriculture for high-value crops
- 6) Rainwater harvesting techniques
- 7) Cultivation of climate-smart crops - Stress-resistant varieties
- 8) Application of biochar
- 9) Alternative Drying and Wetting irrigation in paddy cultivation
- 10) Climate forecasting-based Agro-met advisory & alerts
- 11) Home gardening with self-produced organic manure



Participatory Research in Member Countries:



Training and awareness programs in Member Countries



Financial Report

Two types of budgets are prepared for each fiscal year: Institutional and Programme Cost budgets. During implementing the programmes, the Centre aims to maintain a balance of expenditure between the Institutional and Programme costs.

The Institutional and the Programme costs are shared by all the SAARC member countries according to the SAARC proportion formula.

As the host country, the Government of Bangladesh provides capital costs and other infrastructure facilities. The capital cost supports infrastructure facilities including office premises, furniture, vehicles, equipment etc. or any other items based on its requirement.

The shares of contribution for each SAARC country are as follows.

Name of Country	Share of Institutional cost (%)	Share of Programme cost (%)
Afghanistan	3.09	5.26
Bangladesh	47.87	11.28
Bhutan	3.09	5.26
India	18.76	31.92
Maldives	US\$ 500 (Fixed)	0.00
Nepal	6.63	11.28
Pakistan	13.93	23.72
Sri Lanka	6.63	11.28
Total	100	100

Contribution from Member States

Details of the contributions received from SAARC Member States and contribution that were due in the year 2023 are given below:

S. No.	Name of the Member States	Assessed Contributions payable for 2023 (USD)	Contribution Received (USD)	Outstanding /Due	Excess
1	2	3	4	5	6
1.	Afghanistan	14,663.70	-	14,663.70	-
2.	Bangladesh	2,23,113.77	2,24,797.65	(1,683.88)	(1,683.88)
3.	Bhutan	(1,05,565.15)	-	-	(1,05,565.15)
4.	India	14,997.43	14,997.43	-	-
5.	Maldives	500.00	-	500.00	-
6.	Nepal	31,473.46	32,304.47	(831.01)	(831.01)
7.	Pakistan	(1,02,351.58)	-	-	(1,02,351.58)
8.	Sri Lanka	(82,012.52)	-	-	(82,012.52)
	Total	2,84,748.36	2,72,099.55	12,648.81	(2,92,444.14)

Total Accounts of SAC for the year 2023.

S. No.	Name	Amount In US\$	Spent in US\$	Savings
01.	Institutional Cost	5,04,665.00	3,39,679.30	1,64,985.70
02.	Programme Cost	89,100.00	64,560.39	24,539.61
	Total	5,93,665.00	4,04,239.69	1,89,525.31

1. STATEMENT OF EXPENDITURE- 2023

A) Institutional cost budget of 2023:

Amount in US \$

S.No	Head of Expenditure	Approved Budget of 2023	Expenditure up to 31 December 2023	Closing Balance	Remarks
1	2	3	4	5 (3-4)	6

1.	Allowances to Director and Professional Staff				
	Allowances to the Director	9,000.00	9,000.00	-	
	Entertainment allowances to the Director	1,440.00	1,438.36	1.14	
	Telephone /Mobile bills (Director)	720.00	720.00	-	
	Living allowances to the professionals in LC & FC	88,200.00	53,608.33	34,591.67	
	House rent to the Professionals	45,864.00	23,323.96	22,540.04	
	Medical grant to the Professionals	9,000.00	4,749.55	4,250.45	
	Children edu. Allowances to Professionals	10,500.00	2,187.16	8,312.84	
	Telephone/Mobile bills to Professionals	1,440.00	875.23	564.77	
	Daily allowances to the Professionals in lieu of House allowance on arrival	23,625.00	3,192.46	20,432.54	
	Furniture Grant to the Professionals	8,000.00	4,000.00	4,000.00	
	Home Leave Passage to Professionals	2,400.00	743.38	1,656.62	
	Subtotal:	200,189.00	103,838.93	96,350.07	
2.	Salaries and allowances to the General Services Staff				
	Basic Pay to GSS	89,569.00	81,205.33	8,363.67	
	House rent allowances to the GSS	44,400.00	40,602.69	3,797.31	
	Medical allowances to the GSS	11,760.00	10,239.33	1,520.67	
	Conveyance allowances to the GSS	11,760.00	10,239.33	1,520.67	
	Children Education allowances to the GSS	13,500.00	5,288.14	8,211.86	
	Festival allowances to GSS	7,135.00	7,956.73	(821.73)	
	Office Contribution of C.P. F.GSS	8,480.00	6,790.50	1,689.50	
	Gratuity to the GSS	7,537.00	6,376.11	1,160.89	
	Leave Encashment to the GSS	7,135.00	7,748.22	(613.22)	
	Liveries (GSS IV to VI)	2,400.00	993.43	1,406.57	
	Subtotal:	203,676.00	177,439.81	26,236.19	
3.	Travel Cost and Per dium				

	TCARD Meetings / Programming Committee	1,500.00	--	1,500.00	
	Meetings/of the Directors of the Regional Centres etc-Within the Region			-	
	Airfare, other allowances for the Director and Bus Fare, First class train fare, Per diem and Officials (Lump sum)- Within Bangladesh	500.00	--	500.00	
	Subtotal:	2,000.00	--	2,000.00	

4.	Utilities Services and Maintenance				
	Furnishing	1,000.00	48.15	951.85	
	Furniture	1,500.00	162.24	1,337.76	
	Electrical goods, Tools, Telephone set etc.	1,000.00	230.98	769.02	
	Electricity / Water bill	6,500.00	4,295.71	2,204.29	
	Board, Signwriting, etc	300.00	766.19	(466.19)	
	PBAX, Projector, Photocopy Machine, S.Sysem, etc	1,500.00	77.63	1,422.37	
	Telephone bills (Office)	3,500.00	885.09	2,614.01	
	Computer accessories, Toner, Repair & Maintenance etc	3,000.00	527.95	2,472.05	
	Spare parts, Servicing & Maintenance (Office equipments)	5,000.00	268.04	4,731.96	
	Office Maintenance (out sourcing cleaning security etc.)	8,400.00	4,915.37	3,484.63	
	Art Materials	300.00	101.07	198.93	
	Others	100.00	-	100.00	
	Subtotal:	32,100.00	12,279.32	19,820.68	

5.	Printing, Stationery and Reproduction				
	General Stationery	2,000.00	1,812.70	187.30	
	Print (Office files, pad, folder, envelop etc)	500.00	-	500.00	
	Subtotal:	2,500.00	1,812.70	687.30	

6.	Local Hospitality for Governing Board, Selection Committee meetings				
	Hotel Charges, food, stationary , others (for GBM)	19,200.00	15,953.80	3,246.20	
	Travel cost per diem (For interview of Professionals)	4,800.00	-	4,800.00	
	Subtotal:	24,000.00	15,953.80	8,046.20	

7.	Vehicles, Generator, Lift, Central AC etc. POL, Insurance, Repairs insurance etc.				
	Petrol, Oil, Lubricant and CNG (Vehicles)	6,000.00	6,774.00	(774.00)	
	Diesel for Generator	500.00	225.12	274.88	
	Repairs & Maintenance	11,500.00	5,015.97	6,484.03	
	Insurance Premium , Registration and other charges (1 car, 2 micro bus and 1 Motor cycle)	2,500.00	501.52	1,998.48	
	Subtotal:	20,500.00	12,516.61	7,983.39	

8.	Contingencies and Miscellaneous Charges				
	Advertisement	200.00	350.60	(150.60)	
	Overtime to GSS	3,000.00	3,815.52	(815.52)	
	Entertainment	3,000.00	1,074.16	1,925.84	
	Bank charges	1,500.00	1,088.54	411.46	
	Miscellaneous charges (including – conveyance, labor, legal expert service, etc)	5,000.00	1,478.52	3,521.48	
	Loss & Gain on FC transaction	7,000.00	8,030.79	(1,030.79)	
	Subtotal:	19,700.00	15,838.13	3,861.87	
	Total- Institutional Cost (A)	504,665.00	339,679.30	164,985.70	

B. Programme Cost Budget of 2023:

Amount in US \$

S.No	Head of Expenditure	Approved Budget of 2023	Mode of Programmes (Physical/virtual)	Amount spent	Balance	Remarks
1	2	3	4	5	6 (3-5)	7

Regular Programme**Physical**

1.	SAARC Journal of Agriculture	5,500.00		4,120.42	1,379.58	
	Subtotal:	5,500.00		4,120.42	1,379.58	
2.	In-house research and publication on Thrust Areas of Agriculture in SAARC countries		Physical			
		10,000.00		1,549.60	8,450.40	
	Subtotal:	10,000.00		1,549.60	8,450.40	
3.	SAARC Charter Day observance		Physical			

	(i) Charter day observance	1,500.00		1,193.18	306.82	
	Subtotal:	1,500.00		1,193.18	306.82	
4.	Capacity Building and Professional Development		Physical			
		7,000.00		10,414.42	(3,414.42)	
	Subtotal:	7,000.00		10,414.42	(3,414.42)	
5.	Acquisition of Information materials in Agricultural and allied fields from SAARC Member Countries and othe Membership fee for Professional Association / Societies		Physical			
		6,500.00		5,684.31	815.69	
	Subtotal:	6,500.00		5,684.31	815.69	
6.	ICT Mediated Communication		Physical			
		6,000.00		2,748.46	3,251.54	
	Subtotal:	6,000.00		2,748.46	3,251.54	
7.	Distribution of Information Materials		Physical			
		2,000.00		4.13	1,995.87	
	Subtotal:	2,000.00		4.13	1,995.87	
8.	Promotional Activities of SAC		Physical			
		2,000.00		663.72	1,336.28	
	Subtotal:	2,000.00		663.72	1,336.28	
9.	SAARC Agriculture PhD Scholarship Programme		Physical			
		40,000.00		34,213.50	5,786.50	
	Subtotal:	40,000.00		34,213.50	5,786.50	
10.	Participation in Ekushy book fair 2023 at Dhaka		Physical			
		3,700.00		3,156.67	543.33	
	Subtotal:	3,700.00		3,156.67	543.33	
11.	Participation in the SAARC Seed	4,000.00	Physical	-	4,000.00	

	bank/Food bank/CVO/Epinate Forum/Visit and other meeting					
	Subtotal:	4,000.00		-	4,000.00	
12.	High yielding dairy buffalo programme visit	900.00	Physical	811.98	88.02	
	Subtotal:	900.00		811.98	88.02	
	Total-Programme Cost (Regular)	89,100.00		64,560.39	24,539.61	
	Total Institutional and Program cost (A+B)					4,04,239.69
C. Total Closing Balance 2023		Amount in US\$				
i.	Institutional Cost Budget		164,985.70			
ii.	Programme Cost Budget		24,539.61			
	Total:		189,525.31			

D) Other Receipts for the year of 2023:

Receipts	Amount in US\$
Interest	2,864.09
Sale of SAC Publications	113.21
Total	2,977.30

E) Project Details for the year of 2023:

Receipts		Payments		Remarks
Project Name	Fund Receipts in US\$ (Up to date)	Payments Details	Amounts in US\$	
<u>SDF Funded Projects:</u> “Livelihood enhancement of the small farmers in SAARC region through small scale agro-business focusing on value chain development”	Up to date: US\$ 84,907.00	Expenditure from project inception to December 2023	Up to date: US\$ 76,044.79	The project started in 2019
C-SUCSeS Project (IFAD)	Up to date: US\$ 12,93,787.00	Expenditure from project inception to December 2023	Up to date: US\$ 10,47,900.00	The project Started in 2021. Note that SDF is also involved as Co-financing in receipt and expenditure of the said fund.

SAC Governing Board

The Governing Board (GB) is the apex body to supervise functions of the Centre. The GB is composed of eminent personalities in the field of agriculture from each Member Countries. The GB analyses the policy matters, approves the projects, recommends the annual budget estimates, monitors and evaluates the administrative and overall operations of SAC. A Chairman designated for a two-year term from the member countries by alphabetical order and heads the Board. The GB meets usually once in a year and may meet more frequently if necessary. A representative of the SAARC Secretariat also attends the GB meeting. The Proceedings of the GB meetings need to be approved by the Standing Committee and the Council of Ministers.

Chairman SAC GB

Dr. R.K. Singh

(Chairman SAC GB upto 14, Nov.2023)
Assistant Director General (CC)
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(Chairman SAC GB from 15, Nov.2023)
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SAC Team-2023

S. No.	Name	Designation
1	Dr. Md. Baktear Hossain	Director
3	Dr. Nasreen Sultana	Senior Programme Specialist - Horticulture
4	Dr. Ganga Dutta Acharya	Senior Programme Specialist (PSPD)
5	Dr. Sikander Khan Tanveer	Senior Programme Specialist (Crops)
6	Dr. Grinson George	Senior Programme Specialist – Fisheries Programme
7	Dr. Md. Younus Ali	Senior Programme Specialist (Livestock)
8	Dr Fatema Nasrin Jahan	Senior Programme Officer (NRM) Programme
9	Mr. Md. Abdul Salam	Senior Finance Officer
10	Mr. Md. Saifur Rahman	Administrative Officer
11	Mr. Md. Mizanur Rahman	IT Manager (Database)
12	Mr. Mizanur Rahman	Personal Officer to Director
13	Md. Emdadul Haque	Procurement Officer
14	Mr. Md. Abdul Kadir	IT Manager (Software)
15	Ms. Sanjida Akter	Graphics Designer
16	Mr. ATM Mostafizur Rahman Mojumder	Senior Finance Officer
17	Mr. Md. Nurul Wara	Programme Assistant
18	Mrs. Nazmoon Nahar	Cataloguer
19	Mr. Md. Nurul Amin	Driver
20	Mr. Md. Harun-or-Rashid	Messenger
21	Mr. Md. Helal Uddin	Messenger
22	Mr. Md. Akhter Hossain	Watchman
23	Mr. Md. Altaf Hossain	MLSS
24	Mr. Md. Ashraful Alam	MLSS
25	Mr. Md. Abu Taher	Janitor
26	Mr Muhammad Kamrul Islam	Lift-cum-Gen. Operator





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