

SAARC AGRINEWS



July-September, 2017
Vol.11, Issue 3

Issue Highlights

11th Governing Board Meeting of SAC	1
SAARC-CGIAR Consultation Meeting on Agricultural Research and Development for Food and Nutritional Security in SAARC Region	2
SAARC Regional Consultation on Community-based Non-Wood Forest Products Enterprise: A Sustainable Business Model	5
Regional Experts Consultation Meeting on Conservation Agriculture in SAARC Member Countries	8
Regional Expert Consultation Meeting on Sustainable Goat Farming for Livelihood Improvement in South Asia: Opportunities, Constraints and Potential	9
Regional Expert Consultation Meeting through Video Conferencing on Backyard Poultry Production Systems in SAARC Member States	11
Regional Expert Consultation Meeting "Technology Sharing of Spice Crops in SAARC Countries	12
Scaling-up of Proven Technologies for Maize Improvement through Participatory Approach in the South Asian Region (Video Conference)	14
SAARC Regional Consultation on "Best Management Practices in Aquaculture: Capacity Building and Policy Development"	15
SAC team visited CIAE, IISS and ISC at Bhopal & Bengaluru, India for SAARC Program Development	16
Senior Technical Officer Joined at SAC	

Editor
Dr. Md. Younus Ali
Senior Technical Officer, SAC

Editorial Board
Dr. S.M. Bokhtiar, Director, SAC
Dr. Md. Nure Alam Siddiky, SPO (Livestock), SAC
Ms. Fatema Nasrin Jahan, SPO (NRM), SAC

Graphics
Ms. sanjida Akter

SAARC Agriculture Centre (SAC)
BARC Complex, Farmgate
Dhaka-1215, Bangladesh
Tel: 880-2-58153152
Fax: 880-2-9124596
Email: director@sac.org.bd
Website: www.sac.org.bd

11th Governing Board Meeting of



Dr. S.M. Bokhtiar, Director, SAC delivering speech in the inaugural session

The 11th Governing Board (GB) meeting of SAARC Agriculture Centre was held during 26-27 September 2017 at SAC, Dhaka, Bangladesh. The inaugural ceremony of the 11th Governing Board (GB) meeting was held at Officer's Club, Ramna, Dhaka, Bangladesh on 25 September 2017. Mr. Md. Mosharaf Hossain, Additional Secretary (Extension), Ministry of Agriculture, Government of the People's Republic of Bangladesh graced as chief guest at the inaugural occasion while Dr. Bhagya Rani Banik, Executive Chairman, Bangladesh Agricultural Research Council (BARC) was present as special guest. Mr. Md. Shamsul Haque, Director General (SAARC & BIMSTEC), Ministry of Foreign Affairs, Government of the People's Republic of Bangladesh was present as the guest of honor. Dr. Md. Kabir Ikramul Haque, Chairman, Governing Board of SAARC Agriculture centre and Member Director (Fisheries), BARC presided over the inaugural function. Mr. MJH Javed, Director (Agriculture & Rural Development Division), SAARC Secretariat, Kathmandu, Nepal was present as the representative of the SAARC Secretary General. Dr. S. M. Bokhtiar, Director, SAARC Agriculture Centre delivered the welcome address. Besides, Dr Shiv Prasad Kimothi, Member of India, Mr Lekha Nath Achariya, GB Member of Nepal and Dr BVR Punyawardena, GB Member of Sri Lanka to attend the inaugural session. The representatives from diplomatic missions of SAARC Member Countries (Afghanistan, Bhutan and Pakistan) stationed in Dhaka also graced the occasion. A number of officials from NARS Institutions, BARC, FAO, Practical Action, WINROCK International, Action Aid, Asian Farmer Association, DAE, BADC, World Fish, IRRI, CIMMYT, CIRDAP, KGF who have been intimately working with SAC were also present as special invitees.



Director (ARD) sharing his views in the meeting

Dr SM Bokhtiar, Director, SAC extended his warm welcome to Mr Md Mosharaf Hossain, Additional Secretary (Extension), Ministry of Agriculture, Honorable GB Members and other distinguished guests present in the Inaugural Session of the Meeting. He highlighted activities of SAC and the role of SAC in research and development and dissemination of technologies. He underlined the significance of the 11th GB Meeting as the apex body of the SAC in reviewing of previous activities and formulating future programs and addressing emerging challenges in the agriculture and allied disciplines in South Asia.

Dr Bokhtiar particularly appreciated remarkable contribution made by Mr MJH Javed, Director (ARD), SAARC Secretariat who is going to complete his tenure by early October 2017 after 3 years long service as Director (ARD). Finally he conveyed his sincere gratitude to every one for accepting the invitation and coming up to grace this important event.

Mr MJH Javed, Director, SAARC Secretariat in his inaugural remarks conveyed the best wishes and warm greetings of His Excellency Secretary General, SAARC Secretariat for a successful holding of 11th GB Meeting. He emphasized that GB Meeting is the most important event in the annual calendar. He conveyed special gratitude to all GB members for attending this important event and elaborated on the importance of GB meeting for revised the proposed programs in line with regional agricultural priorities. Mr Javed made a special remark on the high quality of SAC publications by taking the example of procurement of selected SAC publications by US-Library Congress. He finally conveyed his heart felt gratitude all those who sincerely supported him to carry out his assignment as Director (ARD) during fast 3 years

Mr Md Shamsul Haque, Director General (SAARC & BIMESTEC), MoFA, Bangladesh during his remarks as the Guest of Honour made a statement that SAC is the finest institution operated under the SAARC umbrella. He further witnessed that activities of SAC were greatly appreciated by the 53rd Programming Committee Meeting. He expressed that Bangladesh is very much keen to share knowledge and skills on advancements of agriculture, fisheries and livestock sectors with other SAARC Member States. He finally conveyed his best wishes for the successful conducting of the meeting.

Dr Bhagya Rani Banik, Executive Chairman, BARC made a speech as the Special Guest. She appreciated SAC active involvement in linking all National Agricultural Research Organization in the region. She assured continuous support for SAC from BARC to carry out national and regional commitments.



All governing board members

Mr Md Mosharaf Hossain, Additional Secretary (Extension), Ministry of Agriculture, Bangladesh extended warm welcome to all the distinguished members of the SAC Governing Board and wished them a very successful meeting. He highlighted that more than half of total population is living below the poverty line and poverty alleviation is still the most important priority agenda of SAARC. He subsequently pointed out that Her Excellency Sheikh Hasina, Honourable Prime Minister of Government of the People's of Bangladesh has emphasized the importance of joint initiatives of SAARC Agriculture Ministers' Meeting held in Dhaka in 2016. He conveyed his gratitude for active involvement of SAC towards grass root level poverty alleviation through agriculture research, dissemination of agricultural know-how, capacity development and policy intervention. He further praised SAC initiatives to work in partnership and collaboration with international and regional organization such as FAO, IFAD, ISC, UoP-PGIA, APN, AFA, TFNet, ILRI and IRRI.

Dr Md Kabir Ikramul Haque, Chairman, Governing Board of SAC in his speech highlighted that SAC has been evolving over the years as one of the leading regional centre under the SAARC and made its identity. He conveyed his delightfulness over the appreciation of SAC activities at 53rd Programming Committee. Further, he appreciated and made a special remark on SAC's networking with many regional and international organizations during the recent past. He conveyed his sincere gratitude on behalf of SAC GB to FAO, ICARDA, ICRISAT and other organizations for fullest support rendered for carrying out of SAC activities during 2016/ 2017.

Some Important Recommendations of 11th GB Meeting

1. The GB approved the selection of a suitable candidate to pursue PhD in Agricultural Economics on International Agricultural Trade at the University of Peradeniya -Postgraduate Institute of Agriculture (UoP-PGIA), Sri Lanka for year 2018 with partial waiver of tuition fee. Further, GB suggested SAC to make

arrangements to have a Consortium of Agricultural Universities in the SAARC region where to place future awardees of SAC scholarship in future.

2. There are sixteen (16) regular program and twenty five need based program proposed by the SAARC Agriculture Centre for 2018 and subsequently approved by the GB meeting and finally recommended for the approval of Programming Committee Meeting.

3. The GB discussed the budget for 2018 proposed by SAC. GB instructed not to include the Airfare and DSA of GB Members for their participation in the GB meeting in the budget of SAC.

4. Regarding the proposed "Writeshop for developing proposal on innovation in value chain of fruits in SAARC countries", the GB advised that potential donors can be kept in the loop from the initial stage so that they are updated on SAC's interests and initiatives in this subject.

5. The meeting recommended developing 1-2 review articles from the selected need based programs for each issue of SAARC Journal of Agriculture. The task can be assigned to either relevant SPS or eminent line expert for the particular need based program. These review papers would be subjected to the regular review.

SAARC-CGIAR Consultation Meeting on Agricultural Research and Development for Food and Nutritional Security in SAARC Region

As recommended by the 3rd SAARC Agriculture Ministers' Meeting (2016) – "Para 17 and Senior Agriculture Officers' Meeting Para-7: Forge partnership with international specialized agencies" SAC in collaboration with IFPRI organized the SAARC-CGIAR Consultative Meeting on Agricultural Research and Development for Food and Nutritional Security in SAARC Region during 2-3 August 2017 in NASC, New Delhi, India.

The objectives of the meeting were to:

- (i) Forge partnership between SAARC and CGIAR to promote agricultural innovation and technologies dissemination in the region;
- (ii) Exchange knowledge and experiences on regional agriculture, food and nutrition, and poverty challenges and priorities in the region;

(iii) Identify need-based research agenda for the region for possible collaborations.

The meeting was participated by Heads of the NARS from 8 SAARC Member States (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka), SAARC Division-MEA-India, representatives of 13 CGIAR Centre, World Vegetable Centre and CABI.

SAARC Agriculture Centre (SAC) as a regional centre for agriculture and rural development of SAARC, needs to extend itself and partner with other specialized institutions and agencies to initiate programs and projects that can bring about broader and sustainable impacts. -SAC need to have an interactive session with CGIAR Centre working in region to identify synergies and build integrated programs/projects that helps in bringing about positive changes in the region. The Consultative Group for International Agricultural Research (CGIAR) as a global partnership in research .



Group Photo with the Chief Guest Dr. T. Mohapatra, Secretary, DARE and Director General, ICAR, India

has enormous experience and technical expertise in its 15 Centres that can benefit the region. CGIAR Research Programs (CRPs) are multi-center, multi-partner initiatives and currently there are 15 research programs approved and implemented by different institutes.

Dr P K Joshi, Director-South Asia, IFPRI extended a warm welcome to the Chief Guests, delegates from SAARC Member States, representatives of the CG Centres and SAC participants. He also highlighted on the relevance of the meeting at a time when agriculture is rapidly transforming and need for securing food and nutrition has become a priority.

Dr. S.M. Bokhtiar, Director, SAC elaborately explained the concept, purpose and objective of the meeting. As the Special Guest, Dr. Yusuf Zafar, Chairman of PARC, Pakistan highlighted the need for such collaborations and consultations among NARS and CGIAR in view of the similar agenda and targets.

Dr. T. Mohapatra, Secretary (DARE) & Director General (ICAR) as the Chief Guest gave a motivational opening remarks. He highlighted the commonalities of agriculture in the region and how a collaborative and shared vision can enhance development of the sector. He urged all the NARS and CGIAR Centres to critically review the challenges and identify priorities.

Dr Tayan Raj Gurung, SPS (NRM), SAC on behalf of the organizing committee proposed the vote of thanks to Hon'ble Secretary, DARE, GoI, delegates from SAARC Member States and representatives of the CGIAR Centres. He also assured the Chief Guest that his kind words will be taken as a guideline in all the deliberations and identifying common areas for collaboration. He also acknowledged the kind support and partnership of IFPRI-South Asia in conceptualizing, planning and organizing this meeting.

Technical Session I-: Sectoral challenges and priorities for food & nutritional security in SAARC Region

The first Technical Session has been chaired by Dr. Y. Zafar, Chairman of Pakistan Agriculture Research Council (PARC). As a first presenter, Dr SM Bokhtiar, Director of SAARC Agriculture Centre (SAC)

highlighted about the SAC genesis, past activities, potentialities and opportunities of the south Asian agriculture. Likewise, he stressed the need of collaborative programs with CG and other development partners in the area of R&D activities. The second presentation of this session was made by Dr. Tayan Raj Gurung, Senior Program Specialist (NRM) at the title of "Natural Resources in SAARC Region: Challenges, Priorities and Way forward". He explained the core challenges of land cover and land use changes, degradation of land and soil, declining water resources, loss of agro-biodiversity, weakening management systems and vulnerability to natural calamities and climate change impacts. The third presentation was Agricultural policies and strategies in South Asia: Challenges, priorities and way forward by Dr. W.A.R.T. Wickramaarachchi, Senior Program Specialist (Priority Setting and Program Development). He expressed the need of the development of policies on food security considering demographic transition, economic growth, climate change and technologies, mechanism to integrate agriculture with industry and service sector for labor productivity convergence, policy intervention for minimizing fallouts during demographic transformation, development of rural agro-industries for non-farm incomes and climate smart agriculture for the regional policy intervention. As a fourth presentation, Dr. Pradyumna Raj Pandey, Senior program Specialist (Crops) presented the two sectoral papers in crop and horticulture sectors. He pointed out the lack of harmonized crop production polices, plan, strategies and activities in domestic as well as international level.

The next presentation was from livestock sector; Dr. Nure Alam Siddiky, Senior Program Officer (Livestock) disclosed the challenges of this sector as low productivity of the farm animals (cow- 6 2 7 . 8 6 , b u f f a l o - 1 2 5 7 . 9 6 , g o a t - 83.45kg/animal/year), low genetic potential of the indigenous farm animals, small holder dominated livestock farming, shortage of feeds and fodder, highly pathogenic emerging and reemerging of diseases, impact of trans-boundary animal diseases (TADS), low input services for the livestock keepers, indiscriminate livestock breeding policy, weak value chain exist in livestock industry, low investment from both public and private sector, climate change and its impact and Antimicrobial Resistance (AMR) in Livestock Production system. At the last of the sectoral presentation, Dr. S.S. Giri, Senior Program Specialist (Fisheries) highlighted the some of the program of SAC through consultation with experts of SAARC countries prioritized for the Region, which were covering all spheres of fisheries and aquaculture.

At the end of the session, Chairperson Dr. Y. Zafar, concluded the session with sharing happiness from the live and very active discussions from all the participants. He directed to SAC to address trans-boundary issues should be taken priority program in SAC activities in coming years. Finally, he concluded first technical session with very inspiring thought for all, "Best poet can be written in stress condition".

Technical Session II: Agricultural research challenges, priorities and way forward

Each country presentation comprised of over view of importance of agriculture in economy, national agricultural research system (NARS), challenges in agricultural research, opportunities for agricultural research, agricultural research priorities, thematic priority areas for agriculture research and way forward related to their country status. Agricultural technology development, new improved crop varieties and animal breed development, value addition, food safety and standards, climate change issues, post harvest losses, natural resource degradation, small and medium scale agribusiness and agricultural mechanization are the priority areas proposed by majority of Member States seeking future assistance and collaboration.

Technical Session III & IV: Presentation from CGIAR system organization

Representatives from CGIAR system organizations such as IRRI, ICRISAT, CIMMYT, WAC, ICARDA, IWMI, IFPRI, CIP,

WorldFish, ILRI and Bioversity International, World Vegetable Centre have made presentations covering their objectives, success stories and interested areas for future collaborations. Majority of organizations are competent and interested on thematic areas such as value chain development; sustainable intensification; agricultural Policy and institutional analysis; seed and planting material systems; climate smart agriculture; agribusiness and ICT in agriculture. Further, they are willing to assist SAC in germplasm exchange programs and capacity building programs for SAARC Member States



Dr. SM. Bokhtiar, Director, SAC delivering his remarks in the Inaugural Session of the Meeting.

Technical Session V: Brain Storming

CGIAR system organizations shared a many ideas for developing into future projects. The twenty nine thematic areas proposed during the brainstorming session for developing into future collaborative research and development projects.

SAARC Regional Consultation on Community-based Non-Wood Forest Products Enterprise: A Sustainable Business Model

SAC in collaboration with CIRDAP organized SAARC Regional Consultation on Community-based Non-Wood Forest Products enterprise: A Sustainable business model during 24-26th August 2017 in Thimphu, Bhutan with the following objectives:

1. To exchange and share experience on the best community based enterprise on NWFPs in the South and South-East Asia Region;
2. To develop a regional project on Community-based enterprise on Non-Wood Forest Products: A Sustainable livelihood model to up-out scale the successful model to improve livelihoods through product diversification and strengthening market linkages.

The meeting was inaugurated by Dasho Rinzin Dorji, Honorable Secretary, Ministry of Agriculture and Forests, Bhutan who highlighted the relevance of Non-wood forest products in the livelihood systems and its enormous potentials to support sustainable food system in the region.

He urged the participants to share relevant information and come out with a most sustainable model for the community-based enterprise for the NWFPs. The inaugural session was attended by Director General of BAFRA, Director of Agriculture and Forest. The meeting was attended by 7 SAARC Member States (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka), representatives for Policy and Planning Division of MOAF, Department of Agriculture Marketing and Cooperatives, Department of Forest and Park Services of the Ministry of Agriculture and Forests. In addition Director General, CIRDAP, Research Officer of CIRDAP and 4 Member Country of CIRDAP (Fiji, Laos, Myanmar, and Philippines) participated in the meeting. Based on the presentations and group consultations from all the country representatives, some major challenges are identified as follows:



Dasho Rinzin Dorji, Honourable Secretary, Ministry of Agriculture and Forests, Royal Government of Bhutan in the Inaugurating the Meeting

Management

- Lack of capacity of the community
- Lack of constant monitoring
- Lack of conservation of forest resources
- Diverse group members and difficult to come to consensus
- Lack of transparency and leadership of the group
- Lack of matching skills
- Sporadic growth of resources
- Little knowledge on resource management
- Lack of proper functioning of user group

Harvesting

- Limited access to forest resources
- Limitation in innovation by user
- Lack of capacity of the user to harvest, processed and collect
- Lack of right equipment
- Unsustainable harvesting methods
- Harvesting is not based on trader
- Initial financial investmen



A group picture with Chief Guest, MoAF, Bhutan Ministry of Agriculture and Forests

Collection

- More transportation cost
- Limitation in innovation by user
- Lack of adequate knowledge on latest technology to harvest
- No proper transportation
- Post harvest loss
- Lack of management protocol for collection
- No good Packaging
- Marginal farmers are not interested in collection
- No systematic and sustainable collection of resources at right time

Value addition and product development

- No linkages to funding sources
- Lack of storage
- Technological know-how
- Lack of initiative in creating or adhering to international standards
- Weak linkages with research
- Lack of training and infrastructure and fund support
- Lack of expertise
- Lack of quality
- Lack of innovation
- Lack of demand assessment for products

Standard and grade

- Lack of knowledge on product development and processing
- Adulteration
- To expensive to obtain international certificates
- Lack of guidelines and criteria
- Lack of marketable products based on trader's preference
- Lack of information sharing of standard quality and products

Marketing

- No marketing network
- Lack of knowledge
- Lack of good dealership
- Lack of market information
- Too much competitiveness

The following interventions are identified to overcome the challenges through group discussions from the entire country representative:

Management

- Constant monitoring and evaluation of resources
- Good inventory data on forest resources
- Strengthen the forest department to ensure protection
- Formation of groups based on their area of interest and development of constitution
- Capacity building
- Good Governance
- Group training about resource management plan and guideline development for institutional strengthening
- Dissemination of successful research and best practices
- Capacity building –awareness on all aspects of the value chain
- Sustainable utilization of NWFP, reviewing the stock, replenishing resources, harvesting protocol
- Capacity building on financial management, book keeping & accounting, marketing, findings buyers, using the MIS and accessing information
- Analysing/Rationalizing information
- Business planning
- Communication, education and information
- Sensitize and convince the community on “there is strength in number.”
- Group formation with representative from all.
- Provision of resource and training

Harvesting

- Capacity building for groups regarding the latest harvesting techniques
- Package practices of best knowledge
- Facilitate the NWFP group in timely transportation
- Training on sustainable harvesting of NWFP

- Proper guidelines
- Environment friendly and modern technology
- Manual for how to harvest NTFP with required equipment
- Transfer knowledge on good harvesting

Collection

- Methodology and capacity building
- Provide storage facilities at central level
- Develop proper guidelines and implementation/enforcement
- Awareness raising and facilities for transportation
- Introduce use of proper collection equipment such as orate to avoid post harvest loss

Value addition and product development

- Subsidized rates for equipment required for post harvest processing of resource
- To develop strong policy/strategies that community based NWFP's enterprise should follow in the process of value chain
- Tailored made training
- Train groups members on value addition and product development based on market demand
- Knowledge sharing and research technology transfer
- Based on market need
- Assessment
- Vocational trainings about use of NTFP
- Provide appropriate mechanics and equip the members with the much needed skills
- Provision of skill to add value to the product

Standard and grade

- Government oversight in creating a standard or maintaining international standards
- Guidelines
- Provide skills and equipment
- Enforcement of regulations
- Regional certification body
- Information and education about potential of products
- Poor labelling, packaging with detailed story of the products
- Trade marking and fixing of parameter to assess the standard

Marketing

- Facilitation during marketing such as, setting up buyer-seller meetings, etc.
- Information availability market infrastructures development
- Provide updated information on both NTFP groups to market
- Provision of market information at right time
- Investment and subsidies
- Demand oriented marketing
- Support for market study and enabling condition to domestic and international market
- Make the members aware on the marketing dynamics and empower them with better bargaining power
- Do linkage with local and international market

Recommendations

Adopt simple value chain – all inclusive business model, the project should include the following components:

- Information Systems (Resource base and marketing)
- Capacity development at different level
- Technology transfer and piloting
- Inclusive and empowering
- Resource and community management
- Sustainable harvesting
- Processing and equipments
- Harmonized standards.

Regional Experts Consultation Meeting on Conservation Agriculture in SAARC Member Countries

The Regional Experts Consultative Meeting on Conservation Agriculture in SAARC Member Countries conducted in Paro, Bhutan from 28 to 30 August 2017. The program was jointly organized by SAARC Agriculture Centre (SAC), Dhaka, Bangladesh, College of Natural Resources, Royal University of Bhutan, Lobesa, Bhutan and the Department of Agriculture, Ministry of Agriculture and Forests, Thimphu, Bhutan. The Program coordinated by Dr. Pradyumna Raj Pandey, Senior Program Specialist (Crops), SAARC Agriculture Centre, Dhaka, Bangladesh and Dr. Sonam Tashi, (Dean, Academic Affairs and Assoc. Professor, Dept. of Agriculture), College of Natural Resources, Royal University of Bhutan.

The main objective of the meeting was to incorporate best of conservation agriculture and disseminate information among all stakeholders.

Honourable Secretary Dasho Rinzin Dorji, Ministry of Agriculture and Forests was the chief guest of the opening ceremony and Mr. Ganesh Bahadur Chettri, Agriculture Specialist and Advisor of Department of Agriculture (DoA) chaired the opening session. There were 15 participants from the SAARC Member States, civil society (development partners and private sector) and local participants. Dr. Sonam Tashi, Dean, Academic Affairs and Assoc. Professor, College of Natural Resources, Bhutan welcomed to all participants and Dr. Tayan Raj Gurung, Senior Program Specialist (NRM), SAARC Agriculture Centre, Dhaka, Bangladesh highlighted about the concept, purpose and objectives of the meeting. He mentioned the mainly three principles of Conservation Agriculture as; **(i)** minimum soil disturbance, **(ii)** permanent organic soil cover, and **(iii)** diversified crop rotations in conservation agriculture system. Honourable Secretary, Ministry of Agriculture and Forests Dasho Rinzin Dorji addressed the meeting with the past practices and current scenario of conservation agriculture practices in Bhutan. He expressed the reality on behalf of farmers in South Asia, due to time to time change the term of “agriculture development”, as “sustainable agriculture”, “Conservation agriculture” and “commercial agriculture”, farmer’s in South Asia becoming confused. At the end Mr. Ganesh Bahadur Chettri concluded the opening session with highlighted the existing practices of Conservation Agriculture in Bhutan and South Asia. Dr. Pradyumna Raj Pandey, Senior Program Specialist (Crops), SAARC Agriculture Centre, Dhaka, Bangladesh expressed his gratitude and vote of thanks to distinguished guests and participants. Ms. Tshering Choden, Office of the Vice Chancellor, Royal University of Bhutan conducted the program.



Delivering speech by the guest

Technical Session I: Country paper presentation

Two papers were presented by the Member State on “Conservation Agriculture Practices and Successful Technologies in South Asia: Strategies for achieving SDGs” and up scaling conservation agriculture technologies and practices through private sector in South Asia. Major issues are highlighted in presentation as follows:

- Existing conservation practices in respective country;
- Existing conservation technologies as well as areas of interventions on research;
- Development and policy on conservation agriculture in South Asia.

In the presentation, providing soft loans for purchase of implements also felt necessary. It is suggested to declaring tax holidays for manufacturing machineries to be used for conservation agriculture and creating human resources development and capacity building through training and teaching of graduate and post-graduate students of agricultural university. In addition of these policy interventions, introducing and providing carbon-credit to the farmers practicing conservation agriculture for



Participants of the consultative meeting on conservation agriculture
vering speech by the guest

carbon sequestration and greenhouse gas mitigation and encourage PPP (Public-Private Partnership) would be the milestone for promotion of Conservation Agriculture.

Technical Session II: Brainstorming

In the brainstorming session, participants were discussed about the way forward steps of Conservation Agriculture in South Asia and mainly focused on implementation of CA through cluster approach like organic farming in farmers', participatory mode adopting at least one village/20 ha cluster and identify major cropping systems/crop rotations which could be readily taken up for conservation agriculture in different eco-systems namely irrigated, rainfed, dryland, arid, hill and coastal production zones. Regarding the Policy, there should be considered CA as one of the components of national mission on sustainable agriculture and launching of dedicated scheme on CA converging all the related components of various schemes being run by different Ministries/Departments. On the other hand, supplying machineries for conservation agriculture on subsidized rates, promoting custom hiring systems



Field visit on conservation agriculture

Regional Expert Consultation Meeting on Sustainable Goat Farming for Livelihood Improvement in South Asia: Opportunities, Constrains and Potential

SAARC Agriculture Centre (SAC), Dhaka, Bangladesh in collaboration with Pakistan Agricultural Research Council (PARC), Islamabad, Pakistan jointly organized an expert consultation meeting on “Sustainable Goat Farming for Livelihood Improvement in South Asia: Opportunities, Constrains and Potential”

was held in National Agricultural Research Centre, Islamabad, Pakistan during 22-24 August 2017. The main objective was to review and document of existing goat farming practices in the SAARC region. The meeting was attended by seven focal point experts as well as good number of local experts.

Federal Minister for NFS&R Sikandar Hayat Khan Bosan, Chairman PARC Dr. Yusuf Zafar T.I., SPO (Livestock) SAC Dr. Muhammad Nure Alam Siddiky, DG NARC Dr. M Azeem Khan and other Addressing on the Occasion of SAARC Regional Expert Consultation on Sustainable Goat Farming for Livelihood Improvement in South Asia: Opportunities Constrains and Potential at NARC (22nd August 2017)



Honorable Minister and Other Guests are delivering their speech at Inaugural Function

There are thirteen technical papers (e.g. seven country study reports as well as six local research papers on goat genomics, reproduction and diseases) presented in the consultation meeting. Apart from this, one presentation was made by the representative of International Livestock Research Institute (ILRI). The meeting was result oriented which is expressed through participant's knowledge sharing and interaction. The meeting was inaugurated by H.E. Mr. Sikandar Hayat Khan Bosan, Federal Minister, Ministry of National Food Security and Research, Pakistan and concluded by Mr. Muhammad Abid Javed, Secretary, Ministry of National Food Security and Research. For further intervention, the proposed recommendations are as follows:

Thematic Area 1: Major Researchable Issues

1. Genomic analysis to be undertaken for indigenous goat breeds
2. Development of genetic stock (gene bank) by supply of high potential bucks/embryo/semen
3. Production of superior buck through selective breeding and open nucleus breeding scheme approach
4. Utilization of non-conventional feed resources to mitigate the shortage of feeds and fodder
5. Identification of breed specific traits of different indigenous goat breeds adapted in different agro climatic conditions

Thematic Area 2: Major Extension and Development Issues

1. Establishment of nucleus farms for genetically superior goats for its conservation and development
2. Promotion of balanced feed and feeding practices in rural goat farming
3. Wider popularization of goat based business and livelihood models for rural farmers
4. Provision/ facilitation for input services to small farmers
5. Motivation and assurance of regular vaccination and de-worming practices
6. Provision for supply of superior quality buck to the progressive goat farmers
7. Development and provision of artificial insemination for smallholder farmers
8. Establishing virtual system/ use of ICT to improve goat production.

Thematic Area 3: Major Policy Issues

1. Develop and promote linkages among the designated regional R & D organizations for sharing of expertise and experiences
2. Strengthening of public and private sector partnership
3. Exchange of goat germplasm among the Member States for mutual benefits
4. Incentives to be provided for the production and exchange of superior quality buck

5. Organization of regional exchange visit, exposure visit and short internship for professional and scientific community

6. SAARC leading reference laboratory may be developed/ identified for the genomic analysis of indigenous goat breeds

Regional Expert Consultation Meeting through Video Conferencing on Backyard Poultry Production Systems in SAARC Member States

SAARC Agriculture Centre (SAC), Dhaka, Bangladesh organized an expert consultation meeting through video conferencing on "Backyard Poultry Production Systems in SAARC Member States" which was held on 11 July 2017. It was a virtual meeting and the focal persons were connected through Skype. The main objective of the meeting was to help wider dissemination of knowledge and adoption of the best practices on backyard poultry production system to make profitable business. The meeting was attended by the eight focal point experts from the all SAARC Member States. There are seven technical papers has been presented by the seven focal point experts along with other experts. The meeting was inaugurated by Dr. S. M. Bokhtiar, Director, SAARC Agriculture Centre while the meeting was facilitated by Dr. Md. Nure Alam Siddiky, Senior Program Officer (Livestock) of the centre. The Following elaborate and extensive discussion, the meeting proposed a good set of recommendations on different thematic areas for further intervention. The proposed major recommendations are as follows

Researchable Issues

1. Identification and characterization of local promising and potential indigenous backyard poultry genetic resources

2. Structured and planned breeding programs to be initiated considering the consumers need using native and other suitable germplasm

3. Sharing of promising backyard poultry genetic resources under the initiative of SAC

4. Development of effective disease control strategies through surveillance, research, bio-security measures and introducing thermo-stable new castle disease vaccines

5. Development of cost effective feed ingredients and feeding strategy using local resources (household wastes, processing wastes, plants, and probiotics)

6. Development of suitable backyard poultry farming model to be fitted with local needs, resources and environment

7. Development of comprehensive marketing channel for supplying safe poultry meat and eggs with premium price

8. Generation of small scale poultry processing technologies for value addition in poultry meat and eggs

9. Utilization of region specific indigenous breeds for the development of varieties for the backyard poultry farming

Extension Issues

1. Controlling the common diseases like New Castle Disease, Marek's Disease and Fowl Pox is very important in backyard poultry. Regular vaccination and medication should be practiced for better production and returns from the birds

2. Improved management practices of housing, feeding, disease control & bio-security through improved extension services to be ensured

3. Skill up-gradation of rural farmers and women on better husbandry practices, disease control and nutrition on priority basis for effective backyard farming

4. Reduction in mortality especially due to disease outbreaks can be effectively controlled through mass vaccination campaign throughout the country

5. Massive publicity and motivation on the comparative advantages of backyard poultry and its products to be communicated to the community

6. Popularization of rice husk incubation system for supplying ducklings / chicks to different agro ecological zones

Policy Issues

1. Establishment of Regional Gene bank for the conservation of promising backyard poultry genetic resources

2. Promising populations need to be Conservation and maintenance of the indigenous breeds is the urgent necessity as they are available in few numbers only with farmers
3. Public Private Partnership (PPP) mode for large scale propagation of rural poultry farming to be initiated/conserved in a structured breeding program.
4. To promote organic backyard poultry production by providing incentives to the farmers and value addition of these products
5. A comprehensive census relating and reflecting the status of backyard poultry has to be done at country level
6. Development of organized marketing system for rural poultry and poultry products
7. Emphasis has to be given to promote backyard poultry production in national poultry development policy



Participants attending and interacting at the Video Conference Meeting



Participants attending and interacting at the Video Conference Meeting

Regional Expert Consultation Meeting Technology Sharing of Spice Crops in SAARC Countries

The inaugural session of the Regional Expert Consultation Meeting on “Technology Sharing of Spice Crops in SAARC Countries” started with the ICAR song. Dr. K Nirmal Babu, Director, ICAR-Indian Institute of Spices Research welcomed the August gathering of delegates from the member countries, invited guest and the participant institutions and industry representatives.

The concept, purpose and objectives of the meeting were explained by Dr. Pradyumna Raj Pandey, Senior Programme Specialist (Crops), SAARC Agriculture Centre (SAC), Dhaka, Bangladesh. In introduction to the programme he explained the mandate of SAC, which works in crop science, horticulture, fisheries and NRM with a mandate of giving training, capacity building and solution for challenges in Agriculture in SAARC region.

In his opening remarks, he mentioned that farmers / agricultural entrepreneurs of SAARC countries have made tremendous contributions for the health and wealth of their countries. The total demand for spices is increasing among SAARC countries. India holds an important position in spice production among SAARC countries.

SAARC Agriculture Centre, Dhaka in collaboration with ICAR IISR, India has initiated this consultation meeting for sharing of technologies of spices production and value chain management with an objective of benefitting the economy of SAARC countries by spices production and developing intra and internal spice trade among SAARC countries. He appreciated the efforts of Government of India, Indian council of Agricultural Research and IISR for organizing the meeting which will be beneficial for SAARC countries.

Dr. Homey Cheriyan, Director, Directorate of Arecanut and Spices Development, Ministry of Agriculture and Farmers Welfare, Government of India, in his presidential address gave a glimpse of spices scenario in India. Around 63 spices are documented in India, of which 20 are commercialized. Spices contribute 6 % of total GDP and 50 % of foreign exchange from export of horticulture produce. Other than its culinary value, he also emphasised the importance of spices as pharmaceuticals and nutraceuticals. There is an increase in productivity of spices due to improved varieties and technological interventions for the management of pest and diseases, micro irrigation etc. Though 90 % of spices are consumed domestically,

the export of late has increased tremendously owing to price competitiveness and quality produce which were addressed by technologies. In his Inaugural address by the Chief Guest, Dr. P Rajendran, Hon'ble Vice Chancellor Kerala Agricultural University emphasized that spices, apart from earning foreign exchange, they are the livelihood for many farmers in the country and many industries are supported directly or indirectly by spices. The issues with spices are low productivity and price volatility. Low productivity can be addressed by developing improved varieties using the strong genetic pool and biodiversity available with us. To address the issue of price volatility, farm insurance by state government, complete procurement or procurement at fair price by the government need to be set up. Varieties to address climate change, to tackle pest and diseases need to be promoted among farmers and farmers need to be empowered and trained in value addition and product diversification. He also emphasized the need to speed up policy decisions on sharing good quality planting materials among SAARC countries. Creation of seed bank, provision for exchange of planting material and corpus fund for trade issues among SAARC countries are also urgently required. The meeting ended with vote of thanks by Dr. Lijo Thomas, Scientist, ICAR-Indian Institute of Spices Research.



Dr. P Rajendran, Hon'ble Vice Chancellor , Kerala Agricultural University delivering the inaugural address

Key recommendation of Policy & Technological Interventions for Improvement of Spices in SAARC Countries

Policy

- The member states should have a unified stand on food safety and sustainability which need to be codified through frequent dialogues and interaction.
- A spice knowledge portal need to be set up for information and knowledge management pertaining to spices
- Integration and harmonization of GAPs and trade policies among member countries

Research

- Country specific researchable issues in spices need to be identified, prioritized and shared among member states to realize spill over benefits from spices research in the entire SAARC region.
- Create a research platform to address common problems in member countries and facilitate visit of experts across the SAARC countries to share their expertise
- Pilot studies on feasibility of introducing newer spices to member countries should be undertaken
- Immediate efforts should be taken to identify and document the intrinsic qualities of ethnic spice varieties to fetch premium price to growers
- New research initiatives should be undertaken to establish the superiority of natural spices over synthetic ones
- An integrated research and development project may be prepared and submitted for external funding

Linkage

- A spice task force on technology sharing and sorting out trade related issues may be set up
- A technology hub need to be created for creating awareness and sharing of technologies including varieties among member countries
- Mechanism for developing creative partnership models with industry and private sector in contract farming, value addition and processing to be promoted.
- Harmonization of Standard Operating Practices in quality evaluation and processing

Human Resource Development

- A Centre of Excellence in Spices may be established for human resource development and skill enhancement in a suitable location
- Institute scholarships for post graduate and doctoral studies in spices for scholars from SAARC member countries need to be established.

Scaling-up of Proven Technologies for Maize Improvement through Participatory Approach in the South Asian Region (Video Conference)



Participants attending and interacting at the Video Conference Meeting

SAARC Agriculture Centre (SAC), Dhaka, Bangladesh organized an expert consultation meeting through video conferencing on “Scaling-up of Proven Technologies for Maize Improvement through Participatory Approach in the South Asian Region” which was held on 18 September 2017. It was a virtual meeting and the focal persons were connected through Skype. The main objective of the meeting was to improve production of maize by promoting maize improvement technologies with participatory approach of stakeholders, research and extension. The meeting was attended by the six focal point experts from SAARC Member States. There are six technical papers presented by the focal point experts. The meeting was inaugurated by Dr. S. M. Bokhtiar, Director, SAARC Agriculture Centre while the meeting was facilitated by Dr. Pradyumna Raj Pandey, Senior Program Specialist (Crops) of the centre. After elaborate discussions, the meeting proposed a good set of recommendations on different thematic areas for further intervention. The proposed major recommendations by the MemberState are as follows:

Some Key Policy and Technological Recommendations

Bangladesh

- Production of hybrid seeds locally to scale up locally developed hybrids
- Subsidizing or exemption of tax for maize based industry- Starch, maize oil etc.

- Training of farmers and different stakeholders
- Development of stress resilient hybrids-excess soil moisture, lodging tolerant, drought tolerant
- Mechanization in planting, shelling, drying etc.

Bhutan

- Training of young maize staff in breeding and agronomy,
- Sharing of promising hybrids line for heat and drought tolerance
- Yearly SAARC annual work shop on maize program in the region
- CIMMYT should play pro-active role in implementing the maize program in the SAARC region

India

- Post-harvest management of weeds using Tembotrione; Identification of alternative seed hub to support hybrid seed requirement of SAARC countries; Mechanization of post-harvest handling of maize grains
- Establishment of SAARC Maize Working Group towards regional cooperation; Regional linking of source and supply to supplement export-import i.e. to have a on-line system for better connectivity among growers and consumers (poultry and starch industries); Popularization of value added maize products through government schemes.

Nepal

- Formation of SAARC maize working group, SAARC Trails and workshop
- Identified maize mega-environment within SAARC countries.
- Promotion of hybrid technology through licensing and sub-licensing to private partners
- Mechanization to reduce women drudgery and labor shortage

Pakistan

- Ridge sowing to maintain plant population & water saving.
- Use of treated hybrid seed preferably single cross.
- Timely adoption of plant protection measure (weedicides, insecticides & fungicides)
- Use of mechanical harvesting technology.
- Support price for maize produce.
- Encourage and promote Public-Private Partnership for maize improvement and seed production.
- Establish village based enterprises for implements, fertilizers, seeds and other inputs.

Sri Lanka

- Mechanization of planting, mechanical weeding and harvesting to reduce the labor cost
- Promotion of soil conservation package in rain fed uplands to increase productivity of maize

- Strengthening the development of high yielding and stress resilience local maize single cross hybrids through collaboration with CIMMYT and SAARC members
- Scaling up of local hybrid seed production by providing technical and physical inputs
- Encourage the private sector participation for hybrid seed production and for research

SAARC Regional Consultation on “Best Management Practices in Aquaculture: Capacity Building and Policy Development”



Group photo of the participants with chief guest

SAARC Agriculture centre (SAC) has organized a SAARC Regional consultation on ‘Best Management Practices in Aquaculture: capacity building and policy development’ at Negombo, Sri Lanka during 19-21 September 2017. The program was jointly organized by the SAC, Dhaka and National Aquatic Resources Research & Development Agency (NARA), Sri Lanka. Dr. Shiba Shankar Giri, Senior Program Specialist (Fisheries), SAC, Dhaka was the program coordinator and led the SAARC delegation to Sri Lanka. The National Focal-point Experts of the SAARC member countries, Dr. Kazi Iqbal Azam of Bangladesh, Mr. Namgay Dorji of Bhutan, Mr. Rama Sankar Naik of India, Ms. Shafiya Naeem of Maldives, Mr. Gayatri Raj Wagle of Nepal, Dr. Rehana Kausar of Pakistan, Dr. Wasantha Pahalawatte Arachchi of Sri Lanka and Dr S. S. Giri of SAC were in the delegation. Dr Anil Premaratne, the consultation meeting. The regional consultation was inaugurated by Hon. Dilip Wedaarachi, State Minister for Fisheries and Aquatic Resources Development, Sri Lanka.

The objectives of these three day regional consultation were: to identify the issues, challenges and prospects of aquaculture in SAARC region; to discuss the policies, standards and practices pursued by the SAARC member states in aquaculture; to discuss the BMP adopted by other Asian countries, apart from SAARC countries, in aquaculture; to learn the existing mechanisms and future approaches needed to meet the SDGs goal in aquaculture by the SAARC countries. The consultation meeting was attended by more than 40 participants from different institutions and organizations from Sri Lanka, and SAARC member countries. In successive technical sessions, seven country status paper and many oral presentations were made on aquaculture systems and sustainability issues, best management practices, capacity development in aquaculture, international trade and export of aquaculture products and policy issues related to the theme. This was followed by separate working group discussion and policy recommendation for the SAARC Region drafted. After the seminar, the participants had occasion to visit the farming, research facilities, fish landing site and fish vending system of Sri Lanka on 21 September, 2017 and to further continue their discussions.

SAC team visited CIAE, IISS and ISC at Bhopal & Bengaluru, India for SAARC Program Development

Immediately after the SAARC-CGIAR Consultative Meeting on Agricultural Research and Development for Food and Nutritional Security in SAARC Region during 2-3 August 2017 in NASC, New Delhi, India, Dr. SM Bokhtiar, Director, SAC and Dr. Tayan Raj Gurung, SPS (NRM), SAC visited the following institutions with the objective program development.

Central Institute of Agricultural Engineering (CIAE), ICAR, Bhopal

A detail discussed the outline, content and the format for the training on IPNS for soil health and crop productivity. The following issues were discussed and agreed:

- Organize a 2 weeks Regional Training on IPNS in April 2018, the proposal will be finalized by Dr. TR Gurung and Dr. Pradip Dey;
- Establish a regional network of Soil Science Research institutes for exchange of information and knowledge.



Meeting with Dr. KK Singh, Director, CIAE and Heads of Department of CIAE, ICAR, Bhopal

Indian Institute of Soil Sciences (IISS), ICAR, Bhopal

Meeting with Director, Central Institute of Agriculture Engineering, Bhopal discussed about the possibility for SAC and CIAE collaboration on sustainable agricultural engineering. The Following issues were discussed and agreed:



Meeting with Dr. Patra, Director, IISS, Bhopal and Scientists

- Participate in the Seminar and exhibition of agricultural machineries in December 2017 in Dhaka;
- Participate in development of Book on Agricultural Mechanization;
- Organize a week long training on Farm mechanization for small holder farmers in SAARC Region in April 2018 in CIAE;
- Develop and submit a project of agricultural mechanization.

International Sericultural Commission, Bengaluru



Dr. Dayananda, Sericulture Scientist explaining the activities of P4 Farm in Hasan

A meeting held with Mr. KK Shetty and ISC officials in Central Silk Board to discuss about the sericulture development project in India, Bangladesh and Nepal. The following were discussed and decided:

- In two weeks the concept paper on the project will be finalized and submitted to the SAC-GB, PC and SAMM.
- The project formulation meeting will be organized in

Senior Technical Officer Joined at SAC

Dr. Md. Younus Ali has been joined in SAC as the Senior Technical Officer on 1st August 2017. Prior joining here, he was the Head of Training, USAID Agricultural Extension Project under the organization of DAM at Project Office, Banani, Dhaka. He awarded



Ph.D in Poultry Science from the Department of Animal Husbandry & Veterinary Science of Rajshahi University. He obtained MS in Dairy Science from Bangladesh Agricultural University (BAU), Mymensingh. He did his Bachelor of Science (Hons.) from BAU, Mymensingh. He published around 19 (Nineteen) research articles in National and International reputed journal. In his professional carrier he worked with Concern Worldwide, ADSL, PKSF, Proshika and ESDO in diverse area. He has a lot of experience to work with various donors as ADB, DANIDA, IFAD, USAID, IFC, Irish Aid etc.