



Asia-Pacific Association of Agricultural Research Institutions (APAARI)



Progress Report July 2017 – December 2017

*Compiled by Celilu Bitong
Knowledge Management Officer- APAARI*

c/o Food and Agriculture Organization of the United Nations
Regional Office for Asia and the Pacific
FAO Annex Building, 202/1, Larn Luang Road
Pomprab Sattrupai
Bangkok 10110, Thailand

PROGRESS REPORT ON APAARI ACTIVITIES (July 2017 – December 2017)

The Asia-Pacific Association of Agricultural Research Institutions (APAARI) was established in 1990 at the initiative of Food and Agriculture Organization of the United Nations, a unique voluntary, membership-based, self-mandated, apolitical and non-profit multi-stakeholder organization in the Asia-Pacific Region. The main objective of APAARI is to promote and strengthen agriculture and agri-food research and innovation systems through partnerships and collaboration, capacity development and advocacy through facilitation of intra-regional, inter institutional, and international cooperation. APAARI has been active in fostering the overall agricultural development by addressing the concerns of hunger, poverty, environmental degradation and sustainability of agricultural production. It has completed 26 years of its existence with an impressive record of achievements. It has its headquarters at the FAO Regional Office for Asia-Pacific in Bangkok. To know more about the organization, please visit: www.apaari.org

APAARI organized and participated in meetings, conferences and workshops during the period of July 2017 to October 2017. These included (i) APAARI Executive Committee Meeting on 14 July 2017; (ii) SAARC Regional Consultation on 'Facilitating the use of microbial pesticides in South Asia'; (iii) Regional Policy Dialogue on Scaling Conservation Agriculture for Sustainable Intensification (CASI) in South Asia; (iv) FAO Regional Meeting on Agricultural Biotechnologies in Sustainable Food Systems and Nutrition in Asia-Pacific; (v) Capacity Development for Agricultural Innovation Systems (CDAIS), Marketplace; (vi) Global Forum for Rural Advisory Services (GFRAS) Steering Committee Meeting; (vii) Capacity Development for Agricultural Innovation Systems (CDAIS) Global Consultation Meeting 6; (viii) Sustainable Agro Food Business Forum (SABF); (ix) Committee on World Food Security (CFS), GFAR 44th Annual Plenary Meeting; (x) WTO-STDF Working group; (xi) 2nd APAARI Executive Committee Meeting on 12 November 2017; (xii) Regional Expert Consultation on Underutilized Crops for Food and Nutrition Security in Asia and the Pacific; (xiii) APAARI attended an orientation at the International Food Policy Research Institute (IFPRI); (xiv) APAARI hosts a webinar with Universities on Capacity Development for Agricultural Innovation - Bringing System-wide Change in Asia-Pacific; (xv) USDA Assignment on Phytosanitary Capacity Evaluation (PCE); (xvi) APAARI participated in the Regional Coordination Meeting of ICARDA; (xvii) ASTI Implementation and Training Workshop for Southeast Asia and the Pacific; and (xviii) National Symposium on Sustainable Disease Management Approaches and Applications.

I. Meeting/Workshops/Conferences

1. APAARI 1st Executive Committee Meeting for 2017, Bangkok, Thailand

APAARI's first Executive Committee Meeting (ECM) for the year 2017 was held on 14 July 2017 in Bangkok, Thailand. It is the first meeting under the Chairmanship of Dr. Yusuf Zafar, Chairman, APAARI, and Chairman of the Pakistan Agricultural Research Council (PARC). The meeting was attended by 21 participants, which included the members of the Executive Committee, APAARI staff and special invitees. The meeting was presided by Dr. Bhag Mal, Ex-Interim Executive Secretary, APAARI. Key agenda items included: APAARI Progress Report November 2016 – June 2017; Biennial Work Plan 2017-2018, Income and Expenditure Plan 2017; and the latest update on ASTI project. The launch of three new APAARI

publications was announced by Dr. Yusuf Zafar, namely: APAARI Strategic Plan 2017-2022, Proceedings of the Expert Consultation on Best Practices in Agri-food Innovations in Asia and the Pacific, and Investments in Agricultural Research for Sustainable Development in Asia and the Pacific: Country Status Reports.

Some of the highlights of the meeting were APAARI membership and payment status, Audit Report and Audited Financial Statements January-December 2016, project ideas for APAARI governance and development, the launch of the new APAARI website, membership and representation of non-governmental organizations (NGOs), farmers' organizations (FO's) and the private sector in APAARI, expansion of the APAARI Network to Pacific Island Countries, and the tenure of APAARI Executive Secretary. To download the proceedings, please visit this link: http://www.apaari.org/web/wp-content/uploads/downloads/2017/Proceedings_ECM14_July_2017_Final.pdf

2. SAARC Regional Consultation on 'Facilitating the Use of Microbial Pesticides in South Asia', Bangalore, India

SAARC Agriculture Centre (SAC), Bangladesh, the Centre for Agriculture and Bioscience International (CABI)-South Asia, ICAR-National Bureau of Agricultural Insect Resources, Bengaluru, organized the Regional Consultation on 'Facilitating the use of microbial pesticides in South Asia' from 21-23 August 2017 in Bengaluru, India. APAARI participated in the meeting which stressed the importance of the utilization of microbial pesticides in SAARC countries; challenges with IPR, regulatory hurdles, political interference and duplication of research within and across the countries. A call was also made to develop climate-resilient biocontrol agents and genetic improvement of biocontrol agents. The need for innovative funding and partnership strategy was emphasized to have well-knit information opportunities for environmentally- friendly biopesticides, which be better utilized by SAARC. Some success stories about the research carried out in India in dealing with microbial pesticides were shared. Constrains, such as difficulty in rearing of host larvae, problems in fermentation, shelf-life and laborious registration requirement, were also discussed. New approaches including the combination of microbials with anthropod bioagents and symbionts were suggested. The Book of Abstract and e-Publication were also released during the Consultation.

3. Regional Policy Dialogue on Scaling Conservation Agriculture for Sustainable Intensification (CASI) in South Asia, Dhaka, Bangladesh

APAARI participated in the regional dialogue jointly organized by the Trust for Advancement of Agricultural Sciences (TAAS) and the International Maize and Wheat Improvement Center (CIMMYT), and supported by ACIAR from 8-9 September 2017 in Dhaka, Bangladesh. The meeting organizers also collaborated with national agricultural research systems from across South Asia, CG institutes, Australian organizations, government officials, researchers, and policy makers. The meeting focused mainly on sharing country experiences; identification of policy changes; institutions and regulations; recent advances in conservation agriculture in South Asia; current status on scaling CASI; business models and entrepreneurship. For downloading the Proceedings and Policy Brief on CASI, please visit APAARI website links: <http://www.apaari.org/web/conservation-agriculture-proceedings/>; <http://www.apaari.org/web/conservation-agriculture-policy-brief/>

4. FAO Regional Meeting on Agricultural Biotechnologies in Sustainable Food Systems and Nutrition in Asia-Pacific, FAO-RAP, Kuala Lumpur, Malaysia

FAO organized a “Regional Meeting on Agricultural Biotechnologies in Sustainable Food Systems and Nutrition in Asia-Pacific”, hosted and co-organized by the Government of Malaysia, from 11-13 September 2017 in Kuala Lumpur, Malaysia. The objective was to create space for clarifying the needs and concerns in relation to biotechnologies, underlining the needs for maintaining a multi-sectoral approach that covers crop, livestock, forestry and fishery sectors. A wide spectrum of available biotechnologies, including microbial food fermentation, tissue culture in plants, reproductive technologies in livestock, use of molecular markers, genetic modification and other methods were examined by the participants experienced in public sector biotechnology work from across the region, along with those from the private sector and civil society. Representatives from governments, intergovernmental organizations and non-state actors, the civil society and private sector, research/academic institutions and cooperative/producer organizations participated in the meeting.

5. Capacity Development for Agricultural Innovation Systems (CDAIS), Marketplace, Dhaka, Bangladesh

FAO in collaboration with the Bangladesh Agricultural Research Council (BARC), Ministry of Agriculture, organized a 'Marketplace' under the Capacity Development for Agricultural Innovation Systems Project (CDAIS) on 13 September 2017 in Dhaka, Bangladesh. CDAIS is a global project funded by the European Union and is implemented by FAO, Agrinatura, and other partners, in eight countries including Bangladesh.

The project objective is to improve the capacity of value chain actors to promote agricultural innovation and thereby enhance rural livelihoods through continuous learning. The Bangladesh Marketplace facilitated the alignment of initiatives on capacity development (CD) for Agricultural Innovation Systems (AIS) between development partners, CD service providers (supply side), and CD needs of niche partners/value chain actors (demand side). APAARI participated in the event and shared a poster showing its contribution to TAP and alignment with CDAIS activities.

6. Global Forum for Rural Advisory Services (GFRAS) Steering Committee Meeting, Townsville, Australia

APAARI participated in the 8th GFRAS Annual Steering Committee meeting in Townsville, Australia as a representative of GFAR from 14-15 September 2017. The event was co-organized by the Australasia-Pacific Extension Network (APEN). It focused on rural advisory services (RAS) and empowering youth for balanced transformation in rural and urban communities.

The meeting aimed to identify and discuss: roles, challenges and opportunities for youth to become meaningful actors in balanced and inclusive rural and urban transformation; relations between RAS and youth for inclusive and sustainable rural-urban linkages; changes in policies and the capacities of RAS needed for both RAS and youth to fulfil their roles; and the strengthening of capacities of RAS networks through peer exchange and learning.

7. Capacity Development for Agricultural Innovation Systems (CDAIS) Global Consultation Meeting 6, Vientiane, Lao-PDR

APAARI participated in the Global Consultation Meeting 6 in Vientiane, Lao People's Democratic Republic (PDR) from 18-19 September 2017. The meeting shared country progress and lessons learned from the implementation of activities. Discussions focused on the country innovation niches that were created at the beginning of the project.

Project managers, national innovation facilitators (NIFs) and other representatives of these niches travelled to Lao PDR from as far as Angola, Burkina Faso, Ethiopia, Guatemala, Honduras and Rwanda. Bangladesh and Lao PDR represented the Asia-Pacific region. All country teams made poster presentations on the alignment of their work with national strategies, explained the linkages and roles of collaborating actors, shared early progress in the development of functional capacities of their niches, as well as emerging success stories. The meeting was also a good opportunity to share some of the issues that country teams are facing in the implementation of CD for AIS, such as lack of commitment and participation in the niches, physical difficulties to reach the niche locations, and understanding the links between different roles, tools and methods. The participants also explored how to feed project results and the Common Framework developed under the CDAIS project into policy dialogue. All TAP partners attended the presentations and APAARI presented its role and purpose within TAP.

8. Sustainable Agro Food Business Forum (SABF), Bangkok, Thailand

APAARI attended the Sustainable Agro Food Business Forum (SABF) held from 26-27 September 2017 in Bangkok, Thailand. The forum aimed to identify ways to establish a food value chain from producer to the end consumers, and develop a roadmap to establish a Sustainable Agro Food Platform. It also acknowledged the importance of agriculture and the role of food to mobilize micro, small and medium enterprises (MSMEs) food producers, as well as smallholders to achieve the Sustainable Development Goals (SDGs). The dialogue led to the establishment of the Sustainable Agro Food Platform. The multi-stakeholders involved included policymakers, smallholders, SE and MSME business sectors, international agencies, civil society organizations and academics.

9. Committee on World Food Security's (CFS), GFAR 44th Annual Plenary Meeting, Rome, Italy

The Committee on World Food Security (CFS) 44th Annual Plenary Meeting took place in FAO Rome, Italy, from 9-13 October 2017. This inclusive international and intergovernmental platform mobilizes stakeholders to work together to ensure food security and nutrition for all. The event was supported by GFAR, which also provided a two-day training for social reporters to cover the meeting.

APAARI participated in the Social Reporting Training and reported on side events. This was through creation of blog posts, and promotion of the event on various platforms, such as Facebook, Twitter and LinkedIn. The event, organized several discussions ranging from climate change to the role of youth and women in agri-food research and innovation systems, food security and nutrition, forestry, and food diversity.

10. WTO/STDF Working Group Meeting held on 30-31 October 2017

The Standards and Trade Development Facility (STDF) is a global partnership that supports developing countries to implement international food safety, animal and plant health standards, guidelines and requirements, and act as a coordination and knowledge platform. It was established by FAO, the World Organization for Animal Health (OIE), World Bank, World Health Organization (WHO) and the World Trade Organization (WTO). The working group meeting was attended by several representatives from various countries, international organizations and developing country experts. Some of the topics that were raised in the agenda included: operation of the facility, selection of Sanitary and Phytosanitary Measures

(SPS) experts from developing countries, SPS capacity building projects in specific areas and presentation of STDF 2016 Annual Report.

On the topic regarding information about new/emerging SPS initiatives and issues, Dr. Ravi Khetarpal, a Developing Country Expert (CDE), highlighted revisiting the STDF Trust Fund *vis-a-vis* the demands from developing countries. He suggested creating KM regional hubs to raise awareness on trade and SPS issues. He also said that a regional engagement could be useful for mobilizing local expertise to feed into the STDF, and APAARI can be a potential partner in the Asia-Pacific region.

11. APAARI 2nd Executive Committee Meeting for 2017, Bangkok, Thailand

APAARI organized its 2nd ECM under the stewardship of newly appointed Executive Secretary (ES), Dr. Ravi Khetarpal, on 12 November 2017. APAARI Chairman, Dr. Yusuf Zafar, officially launched the ASTI project. He stressed the importance of APAARI-IFPRI collaboration through this ACIAR-funded project. The outcomes would contribute to the development of congenial policies and advocacy tools, and establishment of a resource group to facilitate dialogue on enhanced investments in agri-food innovations in Southeast Asian countries. The meeting highlighted: the action taken report based on the recommendation from the previous ECM held on 14 July 2017; ES tenure; membership fee status; work plan; as well as the income and expenditure for 2018. It was emphasized that the APAARI Secretariat should have a transparent financial management system to meet international standards. Key conclusions of the stakeholder mapping exercise were presented, in particular, its contribution to understanding, assessing, targeting and prioritizing stakeholders for future engagement, partnerships and joint activities. A new dimension was also given to APCoAB as its presence in Asia-Pacific should increase and activities on biotechnology and bioresources should enhance.

Presentations were also made by the EC members, particularly introducing new areas of interest to APAARI. Critical issues and views were also addressed by Dr. Raj Paroda, former ES of APAARI, for strengthening APAARI programmes. He particularly emphasized the need to strengthen existing partnerships with CG centers, organize expert consultation meetings to scope new niches, and foster public/private partnerships, as well as to pursue aggressive membership drive, and revisit Suwon and Tsukuba declaration to revive the APAARI network and climate change actions.

12. APAARI hosts Regional Expert Consultation on Underutilized Crops for Food and Nutrition Security in Asia and the Pacific

A multi-stakeholder “Regional Expert Consultation on Underutilized Crops for Food and Nutrition Security in Asia and the Pacific” was organized by APAARI and the Council of Agriculture (COA), Taiwan, in collaboration with Bioversity International, Crops for Future (CFF), Department of Agriculture (DOA), Thailand, International Centre for Agricultural Research in the Dry Areas (ICARDA), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and WorldVeg (The World Vegetable Centre), during 13-15 November 2017 in Bangkok, Thailand.

The purpose was to: (i) create awareness on the role and value of underutilized crops, which have potential for diversification of food basket to ensure better food and nutritional security in APR; (ii) share experiences to accelerate the use of underutilized plants as crops for future and (iii) assess R&D status on priority crops, and policies that are needed to promote the use of these potential crops for future use in APR. A total of 55 participants from 18 countries (Bangladesh, Bhutan, Fiji, Germany, India, Iran, Japan, Lao, Malaysia, Nepal, Pakistan, the Philippines, Papua New Guinea, Samoa, Sri Lanka, Taiwan, Thailand and Vietnam)

deliberated on the above issues. The participants comprised of senior officials, researchers from National Agricultural Research Systems (NARS), CG Centers, experts on underutilized crops, representatives of research institutions, co-organizers, the private sector, NGOs and farmers.

The Consultation was very timely and relevant as chronically undernourished people increased from 777 million to 815 million from 2015 to 2016 respectively. About 613 million women in reproductive age suffer from anaemia. Every year, 3 million children die of nutrition-related diseases and 2 billion people suffer from micronutrient deficiencies as highlighted by Dr Hiroyuki Konuma in his inaugural address.

The deliberations held during the three-day meeting brought forth many important issues that need immediate attention, and participants gave several suggestions and recommendations.

It was unanimously agreed that working with underutilized plants/crops would mean no poverty (SDG1), zero hunger (SDG2) and climate action (SDG 13). Through developing partnerships, SDG#17 will also be addressed. There was also unanimous agreement for 'functional' definition of underutilized plants/crops at global and national levels. Some of the future crops that have potential to cure diseases and improve health were also discussed. This includes bitter melon (cancer, diabetes, high blood pressure), nana (skin infections, gastrointestinal disorders, and fever) utazi (diabetes) and Nigerian pumpkin-ugwu leaf (diabetes, gastro-intestinal disorders and support to lactating women). These future crops have climate resilience and potential to become livelihood crops for APR.

A holistic rather than reductionist approach to mainstream underutilized plants/crops should be adopted. Consensus emerged that policy makers should be approached to give due attention, generate political will and mobilize funding and subsidies, and promote greater use of these plants. This would require a comprehensive knowledge-sharing system on crops, experts, as well as centres of excellence for capacity building, networking and multi-stakeholder partnerships. Another requirement would be facilitation of germplasm exchange, along with the collection, characterization and evaluation. For this, a global funding system for scholarships, exchange, and projects need to be emphasized, along with awareness generation programmes. The participants lauded the role of APAARI, for holding the consultation, and showed their confidence that APAARI can play a more proactive role in promoting underutilized crops. Based on the consultation, APAARI will develop a focused plan for the member countries to address malnutrition through awareness raising. It will also promote the use of these crops for the future through networks, regional databases, success stories, and project-based R&D.

13. APAARI attended an orientation at the International Food Policy Research Institute (IFPRI)

Norah Omot, ASTI Coordinator, spent a week (15-22 November 2017) at IFPRI in Washington DC, upon joining APAARI on 11 November 2017. The purpose of the visit was to better understand the new ASTI project funded by ACIAR.

The visit involved discussions on the ASTI methodology for data collection and analysis, discussions and familiarization with the ASTI Data Management Portal, as well as meeting IFPRI colleagues, who are attached to ASTI. The ASTI project will be implemented over a two-year period from November 2017 to October 2019 in collaboration with ten countries in Southeast Asia and Pacific.

14. APAARI hosts a webinar with Universities on Capacity Development for Agricultural Innovation -Bringing System-wide Change in Asia-Pacific

Forty-three university representatives from Bangladesh, Bhutan, India, Pakistan and the Philippines participated in APAARI-hosted Webinar on Capacity Development for Agricultural Innovation-Bringing System-wide Change in Asia-Pacific on 16 November 2017. It was organized in collaboration with FAO-TAP, GCHERA and GFAR. The Webinar aimed to:

1. improve understanding of the Common Framework designed under the CDAIS project;
2. raise interest in integrating the Common Framework principles, approaches and tools in higher education curricula to improve capacity for change and realize the potential of innovation;
3. raise awareness of the importance of developing soft skills (“functional capacities”) to unlock the potential for agricultural innovation and the role of higher education in developing the respective capacities; and
4. initiate reflection towards a mindset shift in culture of higher education organizations in APR from: (i) considering knowledge generation as a final objective, to using it as a means to achieve change; (ii) understanding of the system components to systematic understanding of the relationships between the components; (iii) consulting beneficiaries to facilitating engagement for interactive learning between innovation actors; (iv) teaching to learning; and (v) focus on individual merit and competition, to promoting teamwork and collaboration between and within organization.

FAO-TAP presented the Common Framework and key information about the CDAIS project and TAP initiative. TAPipedia – information system on CD for AIS was highlighted as well. FAO Bangladesh explained how the Common Framework is being applied in practice. GCHERA presented the EARTH University model and a pilot project based on this model, that focuses on curricula reform and pedagogy, to better prepare graduates to be leaders in tackling global challenges, such as poverty reduction, food and nutritional security and environmental sustainability. The project will help participating universities incorporate the following key elements of the EARTH model in their undergraduate programmes: experiential (participatory) learning, entrepreneurship, community engagement and ethical and value-based leadership.

The webinar was the first step to engage higher education institutions in APR in discussions on the importance of functional capacities to speed up agricultural innovation. It was also an opportunity to learn about the concepts of the Common Framework that universities can apply in their work, and finally to learn from the success story in Costa Rica, and reflect what the participating institutions could do to bring about positive change in AIS.

To download the synthesis, please check this link: <http://www.apaari.org/web/webinar-with-universities-cdais/>

15. USDA Assignment on Phytosanitary Capacity Evaluation (PCE)

A Phytosanitary Capacity Evaluation (PCE) of Bangladesh was undertaken by Dr. Ravi Khetarpal in Dhaka, Bangladesh, under a United States Department of Agriculture (USDA) project consultancy in two missions. During the first mission undertaken from 22-28 September 2017, four PCE modules out of thirteen as developed by the International Plant Protection Convention (IPPC) of FAO were discussed with the National Plant Protection Organization (NPPO) at Plant Quarantine Wing in Dhaka. Discussions were based on active

involvement of diverse stakeholders, and prescribed forms of the modules filled in online and onward transmitted to IPPC. These four modules were on country profile, national phytosanitary legislation, environmental forces assessment and NPPO's mission and strategy.

In a subsequent mission carried out from 22-29 November 2017, four more modules on NPPO's structure and process, NPPO's resources, pest diagnostic capacity and pest surveillance and pest reporting capacity were discussed. The forms of the modules were filled in and transmitted to IPPC. After completion of the evaluation studies, the analysis of output of the work will give a clear picture on the areas of investment to be done in Bangladesh for their compliances with the Sanitary and Phytosanitary Agreement of WTO, which will eventually help in trade facilitation of agricultural commodities and increase in revenues for the country.

16. APAARI participated in the Regional Coordination Meeting of ICARDA

The 5th Regional Coordination Meeting of South Asia and China Regional Program (SACRP) of ICARDA was jointly organized with Indian Council for Agricultural Research (ICAR) during 5-8 December 2017 in New Delhi, India, with the theme "Strategic Partnership towards Enhancing Food and Nutritional Security in South Asia and China".

The meeting was graciously inaugurated by His Excellency, Shri Radha Mohan Singh, honorable Minister of Agriculture and Farmers' Welfare, Government of India; Prof. T. Mohapatra, Secretary, Department of Agricultural Research and Education (DARE), and Director General (DG), ICAR; Shri P. K. Patnaik, Secretary, Department of Agriculture and Cooperation; Aly Abousabaa, DG, ICARDA; Additional Secretary (DARE and Secretary ICAR), DDGs, ADGs, directors and scientists of ICAR; ADG-ICC, programme directors and scientists from ICARDA, as well as delegates from Afghanistan, Bangladesh, Bhutan, China, Ethiopia, India, Nepal, and Sudan. APAARI was represented by Dr. Ravi Khetarpal, Executive Secretary of APAARI, who took active part in the event.

The two-day event of deliberations was divided into different technical and plenary sessions. This was extended by a two-day visit to ICARDA's research platform, Amlaha, Madhya Pradesh, and attendance of a Field Day in Amlaha village. His Excellency Shri Radha Mohan Singh expressed his hope that this regional coordination meeting will benefit all participating countries and help achieving global food security and sustainability.

He acknowledged the germplasm received from ICARDA on pulses, cereals and fodder cactus, and mentioned that with the establishment of ICARDA's Research Platform in India, R&D deliverables will be enhanced to a new height for the benefit of the region, and also globally. The dignitaries lauded ICARDA's contribution to dryland farming systems through delivering climate-resilient technologies for farmers: on pulses, barley, wheat, and fodder, and small ruminants.

Jointly developed crop varieties are being cultivated by farmers of South Asia and globally, which emerged from Country Papers by partners. ICARDA's new strategy for 2017-2026, will address new areas of research. Through its new structural framework, ICARDA will be able to deliver its research products more effectively and efficiently. Through presentations and discussions, the following major recommendations were made.

1. Regional level collaborative programmes amongst the countries need to be materialized in specific priority areas like climate-resilient agriculture, capacity development, transboundary disease management, rice fallow cultivation, establishment of multilocation testing, free movement of desired germplasm for

sustainable and resilient production systems, seed production and management amongst the South Asian and targeted African countries.

2. The dimension of extension (India-KVK example) needs to be replicated in African centres/countries to disseminate and adopt technology, and take into account further researchable issues.

3. Emphasis need to be placed on precision/digital agriculture, development of suitable feed-fodder systems, conservation agriculture, small-scale mechanization especially for drylands, and the evolving future cropping systems under climate change conditions.

4. Collaborative research programme amongst the CG centers, regional fora and respective NARS may be adopted/strengthened.

5. Priority needs to be given to develop female cattle to boost milk production since it is declining while the demand is growing. Site-specific crop-livestock system needs to be developed.

6. ICT technology needs to be incorporated in all activities, including accelerated breeding techniques.

7. Developing biodegradable lighter mulching material needs to be encouraged.

17. ASTI Implementation and Training Workshop for Southeast Asia and the Pacific

APAARI and IFPRI organized an Implementation and Training workshop in Bangkok, Thailand on 12-14 December 2017. Representatives from ten countries in Southeast Asia and the Pacific attended the workshop. The representatives were designated personnel appointed by the CEOs of NARIs as Focal Points, who will lead the ASTI survey in their respective countries. The workshop aimed to: introduce the programme and its work plan for 2018–2019; familiarize country focal points with ASTI methodology, survey tools, and data collection procedures; receive feedback from the focal points on issues related to investments, capacities, and policy developments in agricultural research; discuss strategies to enhance dissemination and uptake of ASTI outputs, and to receive feedback on the long-term institutionalization of ASTI at the country level.

APAARI and IFPRI are grateful to ACIAR for their support to reduce the knowledge and information gap on the inputs, performance, and outcomes of agricultural research systems in Southeast Asia and the Pacific, and to build a solid foundation for the long-term monitoring of agricultural research investment and capacity.

18. National Symposium on Sustainable Disease Management Approaches and Applications

Dr. Ravi Khetarpal, ES of APAARI, was the Chief Guest in the Valedictory Function of National Symposium on Sustainable Disease Management: Approaches and Applications, held on 23 December 2017 in the College of Agriculture of G.B. Pant University of Agriculture and Technology, Pantnagar, India. The Symposium jointly organized by the Indian Phytopathological Society and the university deliberated on eco-friendly approaches on managing plant diseases, which are taking a heavy toll of our production due to intensification of agriculture and climate change. Dr. Ravi Khetarpal highlighted the importance of research and development in the field of plant protection and on the need of achieving the SDGs by an aggressive

outreach programme. He also gave away the awards to various scientists and students who excelled in their field of research.

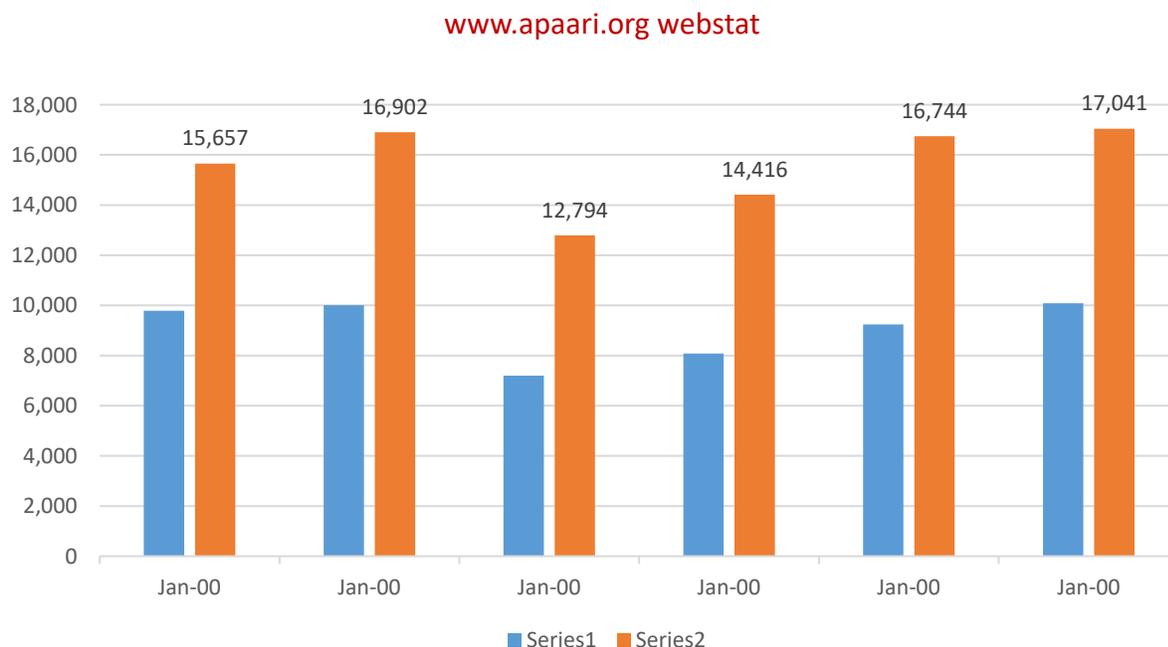
II. Activities Undertaken

1. Knowledge Management Programme

1.1 APAARI Website

The new APAARI website was launched on 14 July 2017 during previous Executive Committee meeting, with a new design and re-organized content. The site is based on Wordpress Content Management System and is mobile-ready, allowing integration of social media applications like Facebook, Twitter, LinkedIn and Blogger embedded on the pages. The website is up-to-date to ensure that APAARI stakeholders can have easy and quick access to news and latest publications on agri-food research and innovation. Moreover, improvements on content and design is still ongoing in order to promote and share more knowledge to its partners and encourage membership in the future.

APAARI Website Statistics (1 July – 31 December 2017)



1.3 APAARI Social Media

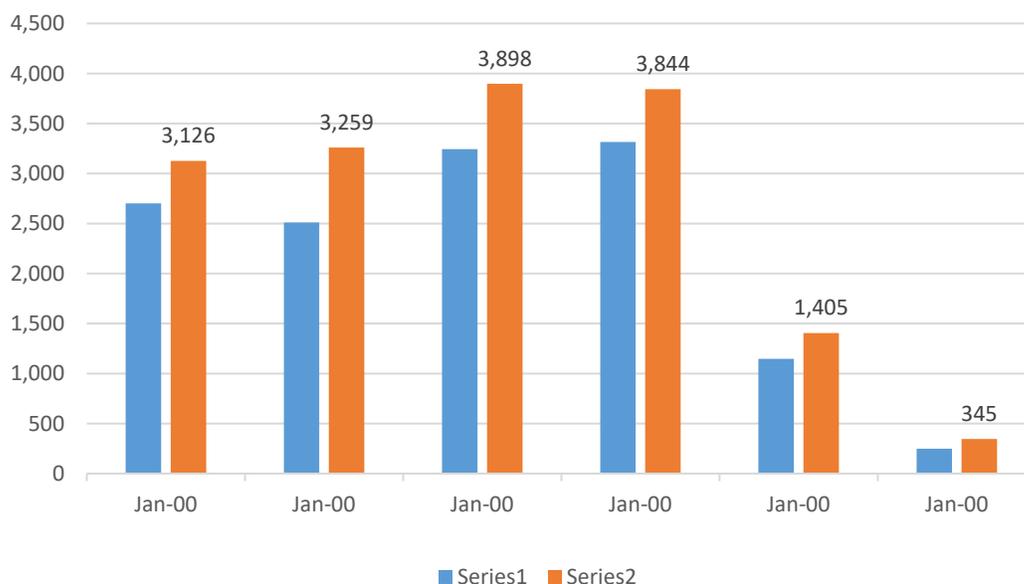
Aside from the website, APAARI is also focused on giving importance to its social media exposure through Facebook, Twitter, LinkedIn and Blogger account. Daily posts of news, upcoming events, opportunities and latest publications from its partners were being shared on the above-mentioned platforms. The collection of

articles is sourced from the APAARI network news, re-sharing posts from their partners’ Facebook account and so as retweeting their posts from Twitter. Currently there are 497 Facebook likes compared to 320 likes; from 94 followers rose to 238 on Twitter and 126 to 185 connections in LinkedIn platforms, on a period from 16 June to 31 December 2017. Connected to LinkedIn is Slideshare – a platform. APAARI Slideshare has been established and currently have 36 presentations which includes; About APAARI to enable people to learn about the Association; APAARI Webinar with Universities on Capacity Development for Agricultural Innovation Systems - Bringing system-wide change in Asia-Pacific; presentations from the Expert Consultation on Underutilized Crops, and presentation on Bringing Transformational Learning and Capacity Development to Universities in Asia-Pacific to Enhance Agricultural Innovation Systems. The APAARI Blogger account currently have two blogs posted created by the APAARI staff who participated in the Commission on World Food Security CFS44 in Rome, Italy. The list will expand as the blogs from APAARI’s partners will be featured as well highlighting the side events from the said annual plenary meeting.

1.4 APCoAB Website

APCoAB website has been continuously updated with contents of latest news and articles related to agricultural biotechnology. The ‘look and feel’ of the APCoAB website is harmonized with APAARI website. The site was recently migrated to apaari server under ‘Our Projects’ but still keeping the same domain name www.apcoab.org

APCoAB Website Statistics (1 July – 31 October 2017)



1.5. Partnership for Knowledge Management

APAARI signed two Letters of Agreement (LoA) with the Food and Agriculture Organization of the United Nations (FAO) in 2017. Its work in partnership with FAO Regional Office for Asia and the Pacific (RAP) will be on the use of drones for agriculture on 2018.

The previously held “APAARI Webinar CD for AIS” on 16 November 2017 is APAARI’s collaboration with FAO in Rome, Italy, on the Tropical Agriculture Platform (TAP) and its Capacity Development for Agricultural Innovation Systems (CD for AIS) project in 2017. Apart from this APAARI will promote the Common Framework on CD for AIS through the printing and dissemination of TAP promotional materials (e.g. factsheets) and presentations at various events, meetings and in online communications; coordinate TAPipedia webinars and facilitation of the expansion of TAPipedia network; facilitate knowledge and experience sharing on CD for AIS within NARS; advocacy with higher education institutions to include the Common Framework on CD for AIS in university curricula; integration the Common Framework on CD for AIS in APAARI-supported activities and projects; and participation in virtual TAP SC meetings.

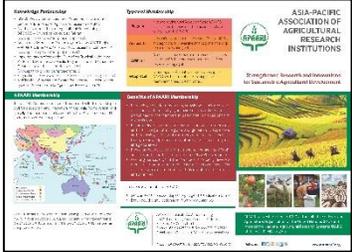
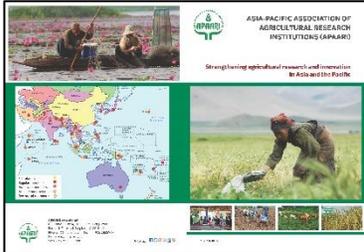
1.6. APAARI Network Highlights

APAARI, with its purpose to promote the latest news, announcements, opportunities and publications from its stakeholders, is being published bi-monthly. Three issues have been circulated during July – December 2017 and shared among its partners, website and social media platforms.

1.7 Publications

APAARI published the latest APAARI Flyers categorized into 2 namely: APAARI Membership and APAARI General Flyer. A newly designed APAARI Folder is also printed to be included and support documents on any upcoming meetings or events. The latest APAARI Newsletter for December 2017 was also released.

Publication	Month in which published	Cover
APAARI Newsletter December 2017	December 2017	
APAARI Membership Flyer	October 2017	

<p>APAARI General Flyer</p>	<p>October 2017</p>	 <p>The flyer features the APAARI logo at the top right, with the text 'ASIA-PACIFIC ASSOCIATION OF AGRICULTURAL RESEARCH INSTITUTIONS' and the tagline 'Strengthening research and innovation for sustainable agricultural development'. It includes a map of the Asia-Pacific region, a list of member institutions, and several small photographs of agricultural research and fieldwork.</p>
<p>APAARI Folder</p>	<p>October 2017</p>	 <p>The folder cover displays the APAARI logo and tagline. It features a large photograph of a person working in a field, a map of the Asia-Pacific region, and a list of member institutions. The text 'ASIA-PACIFIC ASSOCIATION OF AGRICULTURAL RESEARCH INSTITUTIONS (APAARI)' and 'Strengthening agricultural research and innovation in Asia and the Pacific' is prominently displayed.</p>

2. Visits and Partnership

2.1. A visit to FAO-RAP Office, Bangkok

APAARI paid courtesy visits to various consulates and organization in Bangkok as part of its plan to learn and share about any recent and targeted activities where there will possibilities of partnerships. A meeting with FAO-RAP Assistant Director General Dr. Kundavi Kadiresan was held on October 5, 2017 and future collaboration areas were discussed in general and the Pacific countries in particular. Dr. Kadiresan assured APAARI to provide her full support in achieving the common goals in the Asia-Pacific Region.

2.2. General Scoping for Partnership

2.2.1 A Meeting with Taipei Economic and Cultural Officer, Bangkok, Thailand

On August 28, 2017 and October 10, 2017, APAARI visited Mr. Allen Chenhwa Lou, Director Political Division of Taipei Economic and Cultural Office in Thailand and a Plan of expansion of activities under APCoAB was discussed in detail with a focus on application of biotechnology for sustainable utilization of bioresources in Asia-Pacific region.

2.2.2 APAARI visit to Sri Lanka Embassy, Bangkok, Thailand

APAARI had a meeting with high level delegation of Sri Lanka in Embassy of Sri Lanka at Bangkok on October 19, 2017. Sri Lankan delegation comprised of Dr SDG Jayawardena, Chairman, Sri Lanka Council of Agricultural Research Policy (SLCARP), Ministry of Agriculture; Dr JDH Wijewardena, Secretary/Director, SLCARP; Dr Rohan Wijekoon, Director General of Agriculture. Mr Anil Sirimanna, First Secretary (Commerce), Embassy of Sri Lanka in Bangkok, Thailand, was also present during the discussion.

A detailed discussion was held to identify the common areas of interest in agriculture including agricultural biotechnology between APAARI and Sri Lanka to promote sustainable agriculture in Sri Lanka and other countries. Recognizing the expertise developed in Sri Lanka particularly in knowledge management using ICT, agricultural biotechnology, and e-agriculture, how can the benefits be harnessed for the welfare of farmers in Asia-Pacific, was also discussed. Sri Lankan delegation requested for support of APAARI in the area of bio pesticides and marine biodiversity. Capacity building of various stakeholders for sustainable agriculture and policy development and advocacy were also other areas where APAARI and national system of Sri Lanka may collaborate with each other.

2.2.3 FARA Executive Director visited APAARI

A partnership was charted when Dr. Yemi Akinbamijo, Executive Director, Forum for Agricultural Research in Africa (FARA), Ghana, visited APAARI, on October 3, 2017, where a collaboration between the two regional organizations to foster an inter-regional cooperation and synergy in the common mandates was discussed. Several areas of partnership were identified, namely, exchange knowledge and expertise of agricultural research, innovation and development; jointly scoping for regional and inter-regional projects on agricultural related to research, policy, innovation, development, capacity development and policy advocacy with a special focus on women and youth in agriculture; organization of activities of mutual interest including conferences, workshops and training programs in fulfilment of their common goals; exploring the possibility of synergizing their activities in biotechnology and bio resources; Participate in apex committees of the other party on reciprocal basis.

2.2.4 Development and signing of APAARI- NARS Agreement for all ASTI Member countries

Director General of NARS in 9 Southeast Asia and Pacific Islands countries gave written consent to APAARI to collaborate on the ACIAR funded ASTI project. This collaboration will enable capacity building of researchers engaging on the project on ASTI survey methodologies, data analysis and developing publications and policy briefs.

2.2.5 Revision and submission of DoA-APAARI MoU

[Details here..... \(by Dr. Ravi\)](#)

2.2.6 Signing of APAARI-FARA Agreement

[Details here..... \(by Dr. Ravi\)](#)

2.2.7 Dr. Rishi's current visit to Mahidol University, December 28, 2017

A meeting was held with Assoc. Prof. Nopraenu S. Dhirathiti, Vice President for International Relations and Corporate Communication, Mahidol University, on December 28, 2017, to explore the possibilities of future collaborations and partnership between APAARI and Mahidol University.

III. Membership Drive

During the period July – December 2017, a new member joined APAARI in the Affiliate Member category namely the Indian Institute of Technology (IITB), Mumbai, India. The total number of members increased to 71 as compared to 68 in 2016.

IV. International/Regional Collaboration

During the period under report, APAARI had active discussions with FAO-RAP, ACIAR, GFRAS, TAAS, SAARC and DoA, Thailand and organized and participated on several activities/ programmes including coordination of workshops, conferences and expert consultations.

V. Forthcoming APAARI-supported Meetings/Workshops

1. International Collaboration - Third International Symposium on Plant Cryopreservation (CryoSymp 2018)

APCoAB-APAARI will be co-organizer of The Third International Symposium on Plant Cryopreservation (CryoSymp 2018), Asia Hotel, Bangkok, Thailand, to be organized from March 26-28, 2018, with Department of Plant Science, Faculty of Science, Mahidol University, Bangkok, International Society for Horticultural Science (ISHS) and other universities and government organizations. APAARI is represented in International Organizing and Scientific Committees of CryoSymp 2018.

VI. APAARI Participation in Meetings Organized by Other Fora

1. Dr. Ravi Khetarpal gave a key note address and talked about biosecurity engagements and use of biopesticides for meeting SDGs in SAARC regions in the Regional Consultation on 'Facilitating the use of microbial pesticides in South Asia organized by SAARC, ICAR and CABI, Bangalore, India, 21-23 August 2017.

2. Dr. Rishi Tyagi, Coordinator, APCoAB, represented APAARI and acted as Facilitator of Session IV: Policy Dialogue Scaling Conservation Agriculture in Regional Policy Dialogue on Scaling Conservation Agriculture for Sustainable Intensification (CASI) in South Asia, organized by ACIAR and TAAS, Dhaka, Bangladesh, 8-9 September 2017.

3. Dr. Rishi Tyagi, Coordinator, APCoAB, represented APAARI in FAO Regional Meeting on Agricultural Biotechnologies in Sustainable Food Systems and Nutrition in Asia-Pacific, organized by FAO-RAP, Kuala Lumpur, Malaysia, 11-13 September 2017.

4. Ms. Celilu Bitong participated in the Capacity Development for Agricultural Innovation Systems (CDAIS), Marketplace, Dhaka, Bangladesh, 13 September 2017.

5. Dr. Ravi Khetarpal, as a representative of GFAR, participated in the 8th GFRAS Annual Steering Committee meeting, Townsville, Australia, 14-15 September 2017.

6. Ms. Celilu Bitong and Ms. Martina Spisiakova participated in the Capacity Development for Agricultural Innovation Systems (CDAIS) Global Consultation Meeting 6, Vientiane, Lao-PDR, 18-22 September 2017.

7. Dr. Rishi Tyagi, Coordinator, APCoAB, represented APAARI, in Sustainable Agro Food Business Forum (SABF), organized by ESCAP, AFMA, EBAC, Bangkok, 26-27 September 2017.
8. Ms. Celilu Bitong participated in the Social Media Bootcamp of the Committee on World Food Security's (CFS) 44rd Annual Plenary meeting, UN Food and Agriculture Organization (FAO) Rome, Italy, 7-13 October 2017.
9. Dr. Ravi Khetarpal attended the Working Group meeting of WTO's Standard and Trade Development Facility (STDF), Geneva, Switzerland, 30-31 October, 2017.
10. Dr. Norah Omot attended a meeting at IFPRI, Washington DC, 15-22 November 2017.
11. Dr. Ravi Khetarpal participated in USDA's work on Phytosanitary Capacity evaluation, Dhaka, Bangladesh, 22 – 28 November 2017.
12. Dr. Ravi Khetarpal attended a Regional Coordination Meeting of ICARDA South Asia and China on 'Strategic partnership towards enhancing food and nutrition security in South Asia and China', New Delhi, India, 5-8 December 2017.
13. Dr. Ravi Khetarpal participated in the Research Advisory Committee Meeting of the Indian Agricultural Research Institute of ICAR, New Delhi, India, 22-23 December 2017.
14. Dr. Ravi Khetarpal participated in the National Symposium on Sustainable Disease Management Approaches and Applications, Pantnagar, India, 23 December 2017.

VII. APAARI Sponsorship for Capacity Development

1. Implementation of CRP Dryland Cereals Scholarship Programme

Under the Memorandum of Understanding (MoU) between APAARI and ICRISAT for a collaborative CGIAR Research Program (CRP), the Dryland Cereals Scholarship Program was implemented. Six candidates from Punjab Agricultural University, Ludhiana, Sri P.V.N. Telangana State University for Veterinary, Animal, Fishery Sciences. Hyderabad; Field Crops Research & Development Institute, Mahailuppallama, Sri Lanka; Northwest Agriculture and Forestry University, China; and B.A. College of Agriculture, Anand Agricultural University, Anand, are pursuing their Ph.D. research work under this collaborative programme.

As per the Letters of Agreements between APAARI and the respective universities and institutions, the total allocated scholarship grant was USD 94, 212 out of which USD 64,212 allocated for scholarship of these six candidates has been disbursed. The agreement on the scholarship took effect from July 1, 2014 and shall last until 31 December 2016. The CRP-DC Programme has now been concluded and the liquidation statement has been submitted to ICRISAT. Out of six, two students have already submitted their Ph.D. Theses under CRP DC Scholarship Programme sponsored by ICRISAT. The remaining four students are under the process of completion of work including writing and submission of their theses.

2. The Crawford Fund Master Class in Agricultural Research Leadership and Management

The 2nd Master Class in Agricultural Research Leadership and Management" course is scheduled to held from 29 October to 04 November 2017, in Penang, Malaysia. APAARI has nominated 10 participants from 9 countries, namely, Md. Aziz Zilani Chowdhur, Bangladesh; Dr. M. Kamal Sheikh, Pakistan; Dr. Anand Kumar Gautam, Nepal; Mrs. I Kalubowila, Sri Lanka; Dr. Procy B. Sobrevinas, Philippines; Mr. Tekini Nakidkida, Fiji; Dr. Sujoy Rakshit, India; Dr. Prasanna Kumar Pathak, India; Dr. Michael Theophilus Dom, Papua New Guinea and Mr. Chalong Kerdsri, Thailand. The organizers will meet the major expenses and APAARI's commitment for this training course for all the 10 participants will be only USD 5,000.

Master Class program identifies new areas of knowledge that are changing the way research is conducted, particularly in developing countries. In addition to courses on cutting edge technical topics such as molecular genetics, biodiversity and biosecurity, the Fund has conducted Master Classes on intellectual property, science communication, the management of technology transfer, and environmentally oriented areas such as sustainable resources management.

Individual Development Plans

A feature of the Master Class is the opportunity for participants to create an **Individual Development Plan**. This process, including post-workshop follow-up will be facilitated by the Master Class leader. It is anticipated that a strong alumni network can develop, as participants regularly share their progress as a result of participating in the Master Class.

3. Participation in Committee on World Food Security's (CFS), GFAR 44th Annual Plenary Meeting, Rome, Italy

APAARI partially sponsored Ms. Marita Carlos, Director, of the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD), for the two days social media bootcamp training and participation to GFAR 44th Annual Plenary Meeting (Committee on Food Security) in Rome, Italy.

CFS 44 is one of the world's main events for anyone working on food security and sustainable agriculture and GFAR is supporting the online outreach for this event.

Attendance at the CFS44 Social Media Boot Camp enabled participants to gain knowledge and actual practice on how the community of Social Communicators help spread the thematic issues discussed among partners of GFAR at the 44th session of the Committee on World Food Security. 2-day event boot camp was held during 7-8 October 2017 prior to the CFS44 and the participants were introduced to various social media tools, i.e., social networking tools, blogs, photos, videos, slides, webcasting, file sharing and social bookmarking. PCAARRD is a regular member of APAARI and contributes articles relating to agriculture technologies, innovations, information and R&D events, and through the CFS44 training, its capacity to be involved in various KM networks will be more effective.

VIII. Other Items

New Appointments

Executive Secretary

Dr. Ravi Khetarpal has been appointed as Executive Secretary, APAARI and joined APAARI on August 1, 2017.

APCoAB Coordinator

Dr. Rishi Tyagi has been appointed as Coordinator, APCoAB and joined APAARI on August 11, 2017.

ASTI Coordinator /Economist

Dr. Norah Omot has been appointed as Coordinator/Economist, ASTI and she will join APAARI on 10 November 2017.

Knowledge Management Coordinator

Mr. Fai Collins Dzernyuy, an applicant from Center for International Forestry Research (CIFOR), Cameroon, has been selected as Coordinator, Knowledge Management. He will join APAARI in January 2018.

Administrative Assistant (Intern)

APAARI hired a part-time Administrative Assistant - Intern, Ms. Tarathip Sanboonkrong who started working with effect from September 2017. Ms. Sanboonkrong is assisting in the administrative works duly assigned from time to time by the Executive Secretary and will attend to some minor system and network troubleshooting in the workplace. She will be on a probation period of four months.

VIII. Epilogue

During this reporting period, remarkable transitions took place, particularly in the expansion of the workforce to energise existing and newly signed partnerships. Increased trust was made to give renewed focus on its major programmes; APCoAB, Knowledge Management and ASTI project. APAARI's active participations in various meetings and conferences organized by other Fora were also seen as it drives a brave start under a new leadership and perspective, and looking forward to reach more partners, membership and stakeholders into fulfilling its goals to promote and strengthen agriculture and Agri-food research and innovation systems in the region.