

APAARI Strategic Plan 2017-2022



***Pathways to Strengthened
Agri-food Research and Innovation
Systems in Asia and the Pacific***

Asia-Pacific Association of Agricultural Research Institutions (APAARI)

Citation: APAARI 2017. *APAARI Strategic Plan 2017-2022: Pathways to Strengthened Agri-food Research and Innovation Systems in Asia and the Pacific*. Asia-Pacific Association of Agricultural Research Institutions (APAARI), Bangkok, Thailand. 44 p.

The Asia-Pacific Association of Agricultural Research Institutions (APAARI)

is a unique voluntary, membership-based, self-mandated, apolitical and multi-stakeholder organization in the Asia-Pacific region. It promotes and strengthens agriculture and agri-food research and innovation systems through partnerships and collaboration, capacity development and advocacy for sustainable agricultural development in the region. Since its establishment in 1990, it has significantly contributed towards addressing agricultural research needs and enhancing food and nutritional security in the region. The close links, networks, partnerships and collaboration with stakeholders that APAARI has developed over the years, as well as its goodwill, authority and focus on results, make the Association a valuable actor in the region. The ultimate aim of APAARI is to help realizing sustainable development goals in Asia and the Pacific. For more details, please visit: www.apaari.org

ISBN: 978-616-7101-05-7

For downloading soft copy, please visit: [apaari.org/wp-content/uploads/2017/APAARI Strategic Plan 2017-2022.pdf](http://apaari.org/wp-content/uploads/2017/APAARI%20Strategic%20Plan%202017-2022.pdf).

For copies and further information, please contact:

The Executive Secretary

Asia-Pacific Association of Agricultural Research Institutions (APAARI)

4th Floor, FAO Annex Building

202/1 Larn Laung Road

Pomprab Sattrupai District

Bangkok 10100, Thailand

Phone: +662-2822918; Fax: +662-2822920

E-mail: apaari@apaari.org

Website: www.apaari.org

APAARI Strategic Plan 2017-2022:

Pathways to Strengthened Agri-food Research and Innovation Systems in Asia and the Pacific

Asia-Pacific Association of Agricultural
Research Institutions (APAARI)



Contents

Acronyms and Abbreviations	v
Prologue	vii
Executive Summary	ix
1. Introduction	1
2. Development Context in the Asia-Pacific Region	3
3. Strategic Planning Process	5
4. APAARI Theory of Change	7
5. Agri-food Systems Development Outcomes	8
6. APAARI Programmes and Strategies	10
6.1 Knowledge Management	10
6.2 Partnership and Networking	12
6.3 Capacity Development	13
6.4 Advocacy	16
Cross-Cutting Areas	18
6.5 Women and Youth	18
6.6 Foresight and Visioning	19
7. APAARI Governance and Development	20
8. Planning, Monitoring and Evaluation System	22
9. Way Forward	24

Annexures

Annex 1. APAARI contribution to development outcomes – APAARI theory of change	26
Annex 2. Development themes and outcomes	29
Annex 3. Potential partnership between primary stakeholders and APAARI	35
Annex 4. Results framework as basis for the monitoring and evaluation framework – APAARI Strategic Plan	38
Annex 5. Members of the task team for developing the Strategic Plan	43

Acronyms and Abbreviations

ADB	Asian Development Bank
AFS	Agri-food Systems
AFRIS	Agri-food Research and Innovation Systems
AIRCA	Association of International Research and Development Centers for Agriculture
APAARI	Asia-Pacific Association of Agricultural Research Institutions
APEC	Asia-Pacific Economic Cooperation
APR	Asia-Pacific Region
APCoAB	Asia-Pacific Consortium on Agricultural Biotechnology
AR&I	Agricultural Research and Innovation
ASEAN	Association of Southeast Asian Nations
ASTI	Agricultural Science and Technology Indicators Project of IFPRI
CA	Conservation Agriculture
COP	Conference of Parties
CGIAR	Consultative Group on International Agricultural Research
CSOs	Civil Society Organizations
FAO	Food and Agricultural Organization of the United Nations
FOs	Farmers' Organizations
GCARD	Global Conference on Agricultural Research for Development
GDP	Gross Domestic Product
GFAR	Global Forum on Agricultural Research
GMOs	Genetically Modified Organisms
ICT	Information Communication Technology
IFPRI	International Food Policy Research Institute
KM	Knowledge Management
MDGs	Millennium Development Goals
M&E	Monitoring and Evaluation
NARIs	National Agricultural Research Institutes
NAROs	National Agricultural Research Organizations
NGOs	Non-Government Organizations
PM&E	Planning, Monitoring and Evaluation
RCT	Resource Conservation Technology
R&D	Research and Development
SAARC	South Asian Association for Regional Cooperation
SDGs	Sustainable Development Goals
SP	Strategic Plan
SPC	Secretariat of the Pacific Community
TOC	Theory of Change
UN	United Nations
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
USD	United States Dollar

Prologue

The Strategic Plan 2017-2022 delivers the key pathways to strengthen agri-food research and innovation systems (AFRIS), in order to develop agri-food systems and to bring



about sustainable agricultural development in Asia and the Pacific. These developments are considered fundamental requirement in the post-2015 development agenda and in realization of the sustainable development goals by 2030 in the Asia-Pacific Region.

Based on the framework provided by the APAARI Vision 2030, the Strategic Plan has been designed by adopting an inclusive and structured process, comprising i) inception deliberations and conceptualization; ii) online and e-consultations on the challenges, opportunities and needs for interventions;

iii) advanced face-to-face consultation on articulation of strategies and activities; and iv) a number of consultative interactions, seeking suggestions and interventions by the APAARI members, the agri-food research and innovations systems, and their partners and primary stakeholders. The purposefully designed Task Team (Annex 5), consisting of APAARI staff and selected consultants, steered the articulation and construction of the Strategic Plan that provides broad strategic elements and also gives directional guidance in terms of specific strategies and actions for implementation through biennial operational plans. The Strategic Plan has been enriched and approved through the statutory processes of the APAARI Executive Committee Meeting on 8 September 2016 and the 14th APAARI General Assembly Meeting of 3 November 2016.

The Strategic Plan directs APAARI, its partners and other stakeholders to focus on four main themes and their respective outcomes and to contribute to the development of agri-food systems (AFS) in the Asia-Pacific region. These themes are: i) Mobilization, management and use of natural resources for sustainability; ii) Management of risks and uncertainties; iii) Inclusive development and integration of value chains targeted at benefiting smallholders; and iv) Analysis, strengthening and formulation of public policies and overarching regulatory frameworks in support of the transformation and development of AFS.

The main implementation focus areas of APAARI and its partners, termed as APAARI programmes are:

i) Knowledge management, ii) Partnership and networking, iii) Capacity building, and iv) Advocacy and two cross-cutting areas of i) Women and youth, and ii) Foresight and visioning. Each of these programmes and cross-cutting areas are adequately enriched with key strategies, specific strategies and indicative activities that can be pursued as both guidance and directions in implementing the Strategic Plan through subsequent biennial operational plans.

The Strategic Plan is ambitious in terms of strategies, actions and deliverables through development outcomes and this gives rise to a number of implications to reform APAARI in terms of its governance and development as part of the implementation process. The key implications are:

- Enhanced/proactive partnership among APAARI members, partners, the AFRIS and primary stakeholders;
- A platform based on ownership and self-commitments and a mechanism to catalyse change;

- APAARI to be a more diverse multi-stakeholder platform mirroring change at regional level, with membership not only of research organizations but many others such as CSOs (NGOs/FOs), higher education, extension, policy makers, the private sector, development organizations, national, sub-regional and regional governments, etc.;
- The platform to be equitable with inclusivity for key actors involved in AFRIS;
- Transformative but speedy improvements, especially strengthening human and financial resources;
- Development and implementation of an effective Planning, Monitoring and Evaluation (PM&E) system;
- A step-wise transformative process in progressive manner, and to be consistent with structure of APAARI;
- APAARI constitutional reform which will be required to enable effective changes.

The above implications and changes will require APAARI reform to be systematically assessed planned and advanced through regular consultation (within APAARI's members and close partners). It will also be paramount to do the necessary ground-work through canvassing and advocacy to solicit commitments by members, partners and primary stakeholders.

The APAARI Strategic Plan 2017-22 is a starting point for many subsequent actions of APAARI in delivering on its Vision 2030 and sustainable agricultural development which will contribute to the realization of the sustainable development goals. Successful implementation of the Strategic Plan will depend on effective partnership and cooperation between APAARI, agri-food research and innovation organizations, and primary stakeholders as identified in the Plan. APAARI core values of vision, excellence, learning and growing, inclusiveness and accountability, will continue to serve its members, partners and stakeholders, ensuring commitment to the highest level of professionalism to strengthen AFRIS in Asia and the Pacific.

In successfully developing the Strategic Plan 2017-2022 and the APAARI Vision 2030, APAARI has realized a watershed accomplishment in strategically addressing the post-2015 development agenda towards 2030. I am confident, if the Strategic Plan is implemented with sincerity, conviction and rigor, APAARI will prove to be a successful platform of its kind in addressing and contributing to the 2030 development agenda in Asia and the Pacific.

I would like to take this unique opportunity to gratefully acknowledge and profoundly thank a diversity of individuals and groups that were involved as members of the inception deliberations, advanced face-to-face consultation, APAARI Executive Committee Meeting, 14th APAARI General Assembly Meeting, and a vast number of APAARI members, partners and other stakeholders. I also express my special and grateful thanks to members of the Task Team for their untiring and glowing contributions. I am certainly honored and privileged in presenting this Prologue.

I thank profusely all those involved directly or indirectly, actively or passively in the process of designing the APAARI Strategic Plan 2017-2022.

16 December 2016



Raghunath Ghodake
Executive Secretary
APAARI

Executive Summary

The Asia-Pacific Association of Agricultural Research Institutions (APAARI) was established in 1990 with the overall objective of fostering agricultural research and development and contributing to addressing hunger, poverty, environmental degradation and sustainability of agricultural production in the Asia Pacific region (APR). In the past 25 years, APAARI has been promoting and strengthening agriculture and agri-food research and innovation systems (AFRIS) through partnership and collaboration, capacity development and advocacy for sustainable agricultural development. APAARI has contributed to addressing agricultural research needs and consequently enhancing food and nutrition security in the APR.

In 2014, the APAARI General Assembly sought to revisit the APAARI Vision 2025, and reprioritize its activities to meet the needs of a changing development context. In response, APAARI developed its Vision 2030, which outlines the Association's vision for strengthened research and innovations for sustainable agricultural development beyond 2015. The APAARI Vision 2030 aligns to the United Nations (UN) Sustainable Development Goals (SDG) and suggests a strategic direction for the future of AFRIS development in the region.

The Vision 2030 provides the basic framework for developing APAARI Strategic Plan 2017-2022 and the Association's future strategies and operational plans. The vision outlines the overall goal, mission and vision of APAARI. This Strategic Plan creates a road map through which APAARI and its partners and stakeholders can collectively contribute to the realization of the vision. The Strategic Plan provides a resource for decision making, funding allocation and activity prioritization.

The strategies outlined in the Strategic Plan respond to the changing needs of the APR. Whilst the region has experienced rapid economic growth in recent years and consequently made impressive progress against the Millennium Development Goals (MDGs), large disparities persist and the poorest continue to be denied their share of the benefits. Eighteen per cent of the APR population (or 772 million people) still live on less than USD 1.25 per day. Rising incomes and purchasing power are placing pressure on food supplies, driving an increase in income inequality and raising questions of future sustainability. Many of the poorest people in the region are still small producers, hampered by low productivity and inadequate access to input and output markets. Gender inequality and disengagement of youth in agriculture also persist to hamper rural development efforts. The agri-food system (AFS) remains at the centre of the region's key challenges, making APAARI and this Strategic Plan crucial to realizing many of the newly designed SDGs.

The APAARI Strategic Plan has been developed following consultation with APAARI stakeholders and relevant agricultural experts. Using the thematic thrusts described in APAARI's Vision 2030 and an analysis of the current development context, fourteen specific Themes were described and eventually refined into **four priority Themes**. The implementation focus areas of APAARI identified in Vision 2030 were also refined and updated into **four programmes and two cross-cutting areas**. Strengthening APAARI's contribution through improved governance and development of APAARI itself will be the key to transforming AFRIS in the region. Hence, this area is given special attention in the plan.

The four priority Themes set out below (in Table) provide the association and its partners with direction on where they can best contribute to development outcomes, and ultimately the UN Sustainable Development Goals.

Table. Priority themes and development outcomes

Theme	Development outcomes
1. Mobilization, management and use of natural resources for sustainability of AFS	1.1 Land and water resources are managed and used effectively for sustainable productivity and environmental protection. 1.2 Forests, agro-forestry and trees are utilized and integrated for the transformation and development of AFS. 1.3 Agrobiodiversity is effectively managed and utilized for increased agricultural productivity, efficiency and sustainability. 1.4 Biotechnologies and related regulatory systems are promoted and applied for improved productivity, nutritional quality, and sustainability of AFS. 1.5 Systems of sustainable generation and use of energy, including bio-energy and biomass are designed and adapted to local conditions.
2. Management of risks and uncertainties in the AFS	2.1 Policies and strategies for managing (minimizing) price and market risks in agriculture and AFS are developed and adapted. 2.2 Tools for coping with uncertainties arising from the effects of climate change, sea level rise, natural disasters and man-made catastrophes are developed and improved. 2.3 Systematic processes of and partnerships in biosecurity at borders and on farms in preventing and managing the spread of transboundary pests and disease are developed.
3. Inclusive development and integration of value chains targeted at benefiting smallholders	3.1 Small producers, rural communities and women are integrated with other value chain actors so they receive the benefits of integrated markets. 3.2 Innovative best practice for reduced harvest and postharvest loss and wastage is applied and integrated. 3.3 Smallholder agriculture is integrated into manufacturing and service sectors, especially agro-industries, agri-business and agri-services to ensure employment for rural communities.
4. Analysis, strengthening and formulation of public policies and overarching regulatory frameworks to support the transformation and development of AFS	4.1 Research into policy, socioeconomics and markets is supported to assist with developing and implementing policies and strategies to increase agricultural growth and development. 4.2 Policies and strategies for accessing and mobilization of land and water resources by smallholder producers and landless rural communities are developed and adopted.

APAARI programmes – knowledge management, partnerships and networking, capacity development and advocacy - and its cross-cutting areas – women and youth, and foresight and visioning are aligned with and designed to contribute to the four priority themes and their development outcomes. Through these programmes, APAARI seeks to strengthen AFRIS in the Asia Pacific region.

The key strategies, specific strategies and indicative activities under each programme area are summarised below. In the main body of the Strategy, indicators of success are also set out for each strategy. APAARI will undertake these activities over the life of this strategy to implement the core mandated functions of the Association, as given in the Vision 2030 and set out in its constitution, in order to contribute to the development outcomes in above Table. The strategies under governance and development describe the internal organizational changes required so that APAARI can contribute more effectively in strengthening AFRIS within the region.

1. Knowledge Management

Asia-Pacific agri-food systems increasingly depend on the use of knowledge to strengthen innovation processes, such as technology generation, adaptation and application. Stronger processes for collecting, analysing, organizing, accessing, using and sharing scientific information for knowledge creation, problem solving and decision making are required. Combined with partnership and networking, capacity development and advocacy, knowledge management can better facilitate engagement and collaboration that contribute to improved scaling up and out of successful agricultural practices, enhanced agricultural investment, and a higher level of trust among stakeholders.

APAARI strives to use improved knowledge management as an overarching programme to strengthen AFRIS and is well positioned to do so. Through collective action, APAARI has a critical role in informing strategic investments, policies and programmes that can underpin sustainable agri-food systems. APAARI will contribute to knowledge management through the following strategies (Table 1).

Table 1. Knowledge management

Key Strategy 1.1 AFS made more knowledge intensive to effectively contribute to sustainable agricultural development	
Specific strategies	Indicative activities
1.1.1 Promote processes for knowledge sharing, learning and collaboration between primary stakeholders	● Coordinate face-to-face interactions ● Facilitate participation of primary stakeholders in regional and global events ● Share timely information on learning opportunities among primary stakeholders
1.1.2 Promote tools for enhanced knowledge sharing, learning and collaboration	● Revamp the APAARI website and social media tools by updating and organizing content ● Create new tools for knowledge sharing, learning and communication e.g. online discussions ● Link with knowledge tools of members and partners to enable increased outreach

1.1.3 Promote innovative ways to use Information & Communication Technology (ICT) in AFS	• Share solutions and experiences in using ICT in agri-food systems for faster scaling up e.g. through workshops, meetings, policy dialogue and online tools • Facilitate participation of primary stakeholders in ICT-related activities (including e-agriculture)
Key Strategy 1.2 AFRIS strengthened through more effective knowledge management	
Specific strategies	Indicative activities
1.2.1 Enhance knowledge sharing and engagement to enable faster technology, innovation and policy development	• Facilitate face-to-face and on-line meetings for knowledge sharing and engagement • Make knowledge-sharing and learning processes more interactive and learning oriented • Facilitate engagement between farmers, scientists and policymakers to enrich policy debate • Host multi-stakeholder consultations on technology and innovation
1.2.2 Develop skills and capacity of stakeholders in knowledge management	• Train and mentor primary stakeholders on the use of social media
1.2.3 Improve scientific data management to make it available for analysis and knowledge creation	• Support projects that improve data collection for research, compilation, management, analysis, evaluation and application e.g. Agricultural Science and Technology Indicators (ASTI) Project • Improve APAARI publication quality, relevance, packaging and outreach

2. Partnership and Networking

The transformation of AFS and the realization of SDGs cannot be achieved by APAARI alone. Multiple organizations from private, public and civil sectors need to be comprehensively linked at local, national, sub-regional, regional and global levels to bring about large-scale change. APAARI is well positioned to connect national bodies to each other, and to regional and global fora, fostering partnerships and networking through face-to-face events and online communities.

APAARI intends to build partnerships and networks through the following strategies (Table 2).

Table 2. Partnerships and networking

Key Strategy 2.1 Innovative and strategic partnerships and networking strengthened	
Specific strategies	Indicative activities
2.1.1 Facilitate technical cooperation in key Themes	• Initiate and implement strategic partnerships for effective resource mobilization, policy support, knowledge generation, and technology transfer • Coordinate the development of partnership proposals

2.1.2 Develop public-private-community partnerships to improve efficiency of adaptation and application of agricultural technologies and innovations	● Bring public, private and community sectors to expert consultations and policy dialogue ● Facilitate engagement between public, private and community stakeholders
2.1.3 Facilitate networking and collaboration between national, sub-regional, regional and global-level organizations within AFS	● Facilitate engagement of national stakeholders at regional and global events ● Promote engagement of national stakeholders in existing agri-food networks
2.1.4 Facilitate partnership with sub-regional and regional organizations	● Create new ways of coordinating and delivering support to AFRIS through sub-regional organizations, such as ASEAN, SAARC and SPC ● Facilitate collective development actions through regional organizations, such as ADB, APEC, UNESCAP and FAO
2.1.5 Facilitate networking and collaboration between AFS and regional and global multi-sector development partners to collectively work towards development outcomes	● Facilitate engagement with regional and global partners working in development sectors such as health, rural development, infrastructure and finance ● Promote partnership with regional and global initiatives, such as G20, The World Economic Forum, Committee on World Food Security, COP 21 and GCARD
2.1.6 Map primary stakeholders to enable better targeting and stronger engagement in collective action	● Identify potential stakeholders and assess their possible contribution to and benefits from AFRIS ● Assess the contribution from and benefits to APAARI members

3. Capacity Development

Capacity is the ability of the individual or group to perform their responsibilities. For effective and timely development outcomes, the transformation of AFS in the APR needs to be built on scientific advances, improved and validated technologies and adoption at scale. This can only be achieved by developing and strengthening capacity at three levels; individual, organisational and institutional.

APAARI is well positioned to contribute to strengthening capacity by working with its members, partners and other stakeholders to collectively identify and improve individuals, organisations and institutions in areas where capacity is lacking. APAARI intends to contribute to capacity building through the following strategies (Table 3).

Table 3. Capacity development

Key Strategy 3.1 Institutional arrangements for effective delivery of outcomes from AFRIS strengthened	
Specific strategies	Indicative activities
3.1.1 Strengthen institutional capacity for the development of agri-food research and innovation system	• Use online and face-to-face interactions to create a culture of discussion and communication amongst members, partners and other stakeholders • Encourage the sharing of resources – knowledge, human, technical and financial – to strengthen institutional arrangements • Share successful models to reinforce capacity in leadership, governance, transparency, accountability, integrity and human resources
3.1.2 Strengthen databases on human capacity to enhance sharing of talent	• Create and improve existing databases • Share opportunities for training, scholarships, and staff exchange programmes
Key Strategy 3.2 Organizational capacity for good governance, effective management and delivery of research and innovations enhanced	
Specific strategies	Indicative activities
3.2.1 Improve capacity of leaders and research managers in monitoring, evaluation and impact pathway analysis	• Coordinate training programmes on planning, M&E and impact pathways • Develop and share guidelines on M&E and impact pathways
3.2.2 Develop and use improved skills and competency in managerial and organizational roles	• Coordinate training in e.g. leadership, management, governance, transparency, accountability, enabling infrastructure, communication, advocacy, and human resources
3.2.3 Develop basic skills and competency of researchers in small, island and mountainous countries, and new/emerging organizations	• Create learning opportunities for small, island and mountainous countries and new/emerging organizations • Facilitate participation of disadvantaged stakeholders in training programmes • Provide post-training mentoring
3.2.4 Address organizational capacity development needs in knowledge management, partnership and networking and advocacy	• Facilitate training, consultations and publications to develop organizational capacity in knowledge management, partnership, networking and advocacy

Key Strategy 3.3 Technical competency developed	
Specific strategies	Indicative activities
3.3.1 Build capacity of researchers and policy makers in technical areas	• Coordinate training in conservation agriculture, conservation and use of neglected species, options for recycling agricultural biomass, coping with uncertainties and/or cost-effective inputs and services for primary production • Facilitate policy dialogue on land and water resources, market integration and biotechnology • Organize expert consultations on developing/adapting options for improved land and water management, agro-forestry, on-farm conservation of underutilized crops, biotechnology, recycling agricultural biomass, climate-smart technologies and/or on-farm harvest and postharvest strategies
3.3.2 Improve collaboration in areas requiring regional cooperation	• Organize policy dialogue on standards and regulations on agrobiodiversity, integration of value chains and/or cost-effective production of inputs and services • Facilitate sharing of expertise in technical and managerial areas, such as managing agrobiodiversity and transboundary pests and disease

4. Advocacy

Economic growth originating from agriculture has been shown to be 2-4 times more effective at reducing poverty than growth originating from other sectors. Despite this trend, in the regions where hunger and poverty are the most widespread today, there are declining or stagnant levels of investment in agriculture. Increasing investment and improving understanding on the crucial role of agri-food research and innovation in development requires advocacy.

APAARI can play a role in advocating for investment in agricultural research at a regional level, and is well positioned to lead this coordinated action through the following strategies (Table 4).

Table 4. Advocacy

Key Strategy 4.1 Understanding of the role of agri-food research and innovations in AFS and socio-economic development improved	
Specific strategies	Indicative activities
4.1.1 Increase political recognition of the role of agri-food research and innovation as a major driver of socio-economic development	• Monitor the contribution of agri-food research and innovation to socioeconomic development through data analysis • Conduct studies and policy research on issues related to agri-food research and innovation • Share results with policymakers through events, online and publications, such as policy briefs

4.1.2 Improve the voice and engagement of disadvantaged stakeholders involved in AFS	● Improve representation of disadvantaged stakeholders in regional events ● Provide face-to-face and online opportunities to share issues and success stories ● Facilitate documentation and dissemination of experiences of disadvantaged stakeholders
4.1.3 Strengthen capacity for advocacy	● Develop an advocacy resource kit ● Provide training on different advocacy tools
4.1.4 Engage social and broadcast media to strengthen advocacy efforts	● Ensure participation of journalists from national, regional and/or global media in APAARI events ● Promote APAARI events through social media ● Encourage primary stakeholders to use APAARI blog for greater outreach
Key Strategy 4.2 Investment in agri-food research and innovations improved for development of AFS	
Specific strategies	Indicative activities
4.2.1 Enhance understanding of agri-food stakeholders and policy makers on the need, scope and return of improved investment	● Use events, policy dialogue and communication campaigns to sensitize agri-food stakeholders and policy makers on the need, scope and return (actual and potential) of improved investment ● Facilitate socioeconomic and policy studies
4.2.2 Assess the status, trend and priority for investment, and use the data to attract investment and improve decision making	● Work with IFPRI to plan and implement the ASTI project ● Assess and use investment data for improved advocacy to mobilize investment for priority areas
4.2.3 Develop advocacy tools and on-going dialogue on promoting investment	● Develop advocacy tools, such as policy briefs and fact sheets, to promote improved investment ● Establish a resource group to facilitate dialogue on improved investment
4.2.4 Assess and develop skills and capacities for mobilizing investment	● Coordinate training on mobilizing investments ● Develop guidelines to feed into the advocacy toolkit
4.2.5 Assess and adopt innovative funding and partnership mechanisms	● Document and share experiences with innovative funding and partnership mechanisms in APAARI-supported events ● Initiate innovative partnerships e.g. with the private sector, regional and sub-regional organizations

Cross-Cutting Areas

5. Women and Youth

Agriculture is underperforming in many Asia-Pacific countries. One reason for this is the “gender gap” in agricultural productivity. Across the Asia-Pacific, women are food producers and entrepreneurs, but they can rarely access productive resources, markets and services as easily as their male counterparts. This hinders their productivity and reduces their contribution to the agriculture sector and to the achievement of broader economic and social development goals. Women are also underrepresented in agricultural research and forums for decision making.

Over 20 per cent of the Asia-Pacific population are youth and although only one in five workers are between the ages of 15 and 24, this group accounts for almost half the region’s jobless. Employment and entrepreneurial opportunities for young people, especially those in rural areas are limited, and most of the jobs available are poorly remunerated and generally unattractive to young people. Young people are also under-represented in decision-making.

APAARI recognizes the lost opportunities created through the gender gap and the disengagement of rural youth in agriculture. Women are talented farmers, entrepreneurs and scientists, and youth have enthusiasm and inherent aptitude for technology adoption and innovation. These attributes are being undermined and underutilized. APAARI can be a forum where women and youth can have their voices heard and make a bigger contribution through the following strategies (Table 5).

Table 5. Women and youth

Key Strategy 5.1: Women and youth are engaged in productive and rewarding activities in AFS	
Specific strategies	Indicative activities
5.1.1 Strengthen the engagement of women and youth in agricultural value chains, to enable them to receive a higher share of benefits from integrated markets	• Document and share success stories on value adding activities that are attracting women and youth • Involve more women and youth in expert consultations related to value chains • Promote engagement of women and youth through communication campaigns and social media
5.1.2 Improve opportunities for women and youth in agri-food research	• Promote research scholarships and other work opportunities for women and youth • Involve more women and youth in analytical work, including in APAARI • Promote success stories about women and youth working in agricultural research
5.1.3 Build capacity of women and youth in AFRIS	• Coordinate training for women and youth in value addition, agri-food research and extension, entrepreneurship, ICT and KM

Key Strategy 5.2: Women and youth are appropriately represented in policy and decision making in AFS	
Specific strategies	Indicative activities
5.2.1 Strengthen organizations of women and youth at national and regional levels to give them greater voice	• Create opportunities for women and youth to engage in regional and global dialogue • Encourage women and youth to learn and share experiences at APAARI events • Collect gender and age disaggregated data on participants at capacity development events
5.2.2 Ensure inclusive representation of women and youth in APAARI	• Recognize and include women and youth as active members and staff of APAARI • Include women and youth in APAARI governance and policy decision making

6. Foresight and Visioning

Foresight and visioning will allow APAARI to analyse changes in the development context, trends, challenges and opportunities emerging over time and space and adjust its priorities and implementation plans accordingly. This realignment will occur through on-going foresight and visioning exercises. Such exercises will also encourage innovation and analysis that can be turned into actions to effectively address the future development of AFS. These will focus on development themes and APAARI programmes and will also include the community-based foresight and prioritization of regional needs to set the agenda for collective action.

Table 6. Foresight and visioning

Key Strategy 6.1 Developments, trends and changing needs that may impact on the realization of Vision 2030, are continuously monitored and evaluated and turned into actions
--

7. APAARI Governance and Development

Good organizational governance and continual efforts to develop the capacity and effectiveness of APAARI will drive the results sought and described in this strategic plan and help fulfil the ambitions set in the APAARI Vision 2030.

This will require appropriate refinements in APAARI governance and increased capacity in securing and managing financial, material, and human resources. To strengthen its capacity APAARI also needs to improve its management systems with a special focus on planning, monitoring and evaluation (PM&E), and decision making through relevant policies and management standards. Stronger governance will be pursued through the strategies outlined in Table 7 below.

Table 7. APAARI governance and development

Key Strategy 7.1: APAARI is efficient and effective in contributing to strengthening of AFRIS in the APR	
Specific strategies	Indicative activities
7.1.1 Develop and effectively utilize the human capacity of the APAARI Secretariat	● Acquire and develop human talent in accordance with strategic priorities ● Develop human resources through staff exchange, secondment, in-service training, and graduate training
7.1.2 Effectively mobilize and utilize APAARI's financial and material resources	● Mobilize funding through proactive revenue measures, and optimal use of reserves ● Develop partnership and engagement strategy and standard to guide resource mobilization efforts ● Allocate funding in accordance with strategic priorities
7.1.3 Develop APAARI Secretariat competency in the four programme areas	● Support existing staff to participate in professional development and training
7.1.4 Implement a PM&E and outcome assessment system	● Develop and implement effective PM&E systems for performance assessment of APAARI programmes
7.1.5 Develop effective leadership and management, incorporating appropriate systems, structure and processes	● Refine policies and management standards for management of resources ● Develop an enabling environment within the association for efficiency and effectiveness ● Apply principles of transparency, accountability, prudence and due diligence in all APAARI operations
7.1.6 Reform APAARI to deliver on APAARI's mission and vision	● Build an inclusive environment with more stakeholders and wider representation ● Focus on women, youth and CSOs that represent small producers ● Assess and refine decision making and governance mechanism of APAARI to maximize efficiency ● Change/amend APAARI constitution when necessary in accordance with the provision of Article 16 of the Constitution to deliver on APAARI mission and vision

APAARI views the development and implementation of an effective PM&E system as an important part of the implementation of the Strategic Plan. APAARI will develop biennial PM&E frameworks consistent with respective biennial operational plans, having quantitative and qualitative performance indicators on activities, inputs, milestones and outputs. These indicators will follow 'Specific, Measurable, Achievable, Realistic and Time-bound' (SMART) criteria with adequate flexibility, including appropriate allowances for changes in resource availability, assumptions and risks. The outcomes from projects and activities within operational plans will be consolidated to assess their contributions to the development outcomes outlined. This process will allow continuous refinement and adjustments to the M&E framework presented.

The APAARI Strategic Plan 2017-22 is a starting point for many subsequent actions of the Association in delivering on APAARI Vision 2030. Successful implementation will depend on effective partnership and co-operation between APAARI, agri-food research and innovation organizations, and primary stakeholders as identified in the plan. APAARI core values of vision, excellence, learning and growing, inclusiveness and accountability, will continue to serve its members, partners and stakeholders, ensuring commitment to the highest level of professionalism to strengthen AFRIS in Asia and the Pacific.

1. Introduction

The Asia-Pacific Association of Agricultural Research Institutions (APAARI) was established in 1990 with the support of the Food and Agriculture Organization of the United Nations (FAO) and many national agricultural research institutes (NARIs) and national agricultural research organizations (NAROs) within the Asia-Pacific region (APR). The overall objective of APAARI is to foster agricultural research and development and contribute to addressing hunger, poverty, environmental degradation and sustainability of agricultural production in the APR. APAARI is a unique, voluntary, apolitical, non-profit, membership-based and multi-stakeholder regional organization.

In the past 26 years, APAARI has been promoting and strengthening agriculture through partnership and collaboration, capacity development and advocacy for sustainable agricultural development. APAARI has significantly contributed towards addressing regional agricultural research needs and enhancing food and nutritional security in the APR.

APAARI's key strength lies in bridging national, regional and global stakeholders to bring about collective change in agri-food systems¹ (AFS). A particular focus has been on addressing the needs of resource-poor smallholder producers. AFRIS supported by APAARI is comprised of interconnected and interdependent organisations, including NARIs, NAROs, CGIAR institutes, Association of International Research and Development Centers for Agriculture (AIRCA), agricultural universities, agricultural extension providers, civil society, the private sector, farmers and rural communities. These primary² stakeholders are the key to collective efforts.

In 2014, the APAARI General Assembly expressed a need to revisit the APAARI Vision 2025, developed in 2000 and reprioritize its activities in light of recent developments in agriculture, as well as the many challenges and opportunities facing the APR. In response APAARI developed its 'Vision 2030'³ http://www.apaari.org/wp-content/uploads/downloads/2016/03/APAARI-Vision-2030_10-3-2016_Low-resolution-2.pdf, which outlines the Association's vision for strengthened research and innovations for sustainable agricultural development beyond 2015.

The APAARI Vision 2030 aligns to the UN's Sustainable Development Goals (SDGs) and suggests a strategic framework for the future. It describes the needs facing AFS in the APR including:

¹In this context, agri-food systems cover farming of crops and livestock, fish, pastoralism and forestry/agro-forestry, their production systems and their associated post-harvest food value chains and service industries, with a particular focus on the needs of resource-poor smallholder producers.

²Primary stakeholders are a focused group of pre-identified stakeholders that are currently involved closely with APAARI and its partners; namely NARIs, NAROs, CGIAR, AIRCs, Higher Education Institutions, CSOs (NGOs, FOs), women and youth groups, the private sectors, and development organizations (national, regional and global and intergovernmental) that have been used for targeting and sharing of resources, partnership, information and benefits as arising from APAARI collective actions. These are approximately 350 individuals and organizations.

³APAARI Vision 2030: Strengthened Research and Innovations for Sustainable Agricultural Development. Asia-Pacific Association of Agricultural Research Institutions (APAARI), Bangkok, Thailand.

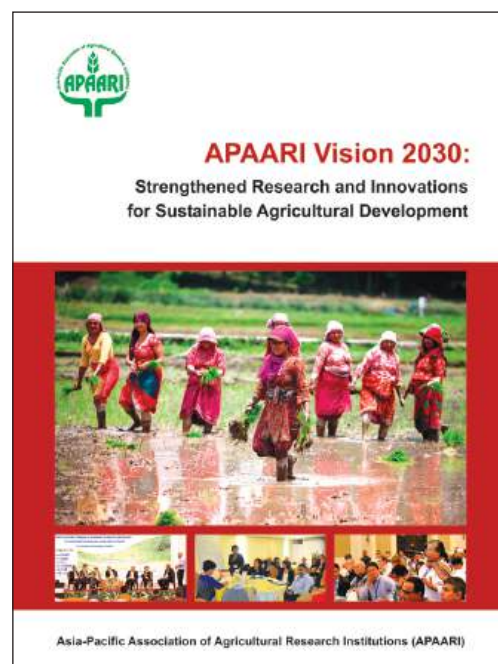
The Key Elements of APAARI Vision 2030

VISION: Strengthened research and innovations for sustainable development in Asia and the Pacific.

MISSION: Promoting, coordinating and strengthening agriculture and agri-food research and innovation systems through partnerships and collaboration, capacity development and advocacy for sustainable agricultural development in Asia and the Pacific.

GOAL: The Asia-Pacific region benefits from and values APAARI's leadership and contribution to developing agriculture and agri-food research and innovation systems.

- Developing more sustainable and climate-resilient systems
- Satisfying the dietary and income needs of smallholder producers
- Accelerating the shift to a bio-based, low carbon economy
- Ensuring greater inclusion of disadvantaged countries in development efforts
- Addressing changing demographics
- Harnessing alternative options for sustainable development
- Providing better amenities to support improved quality of life
- Avoiding erosion of cultural heritage
- Improving representation and participation of smallholder producers in decision making
- Attracting talented professionals including women and youth in agriculture
- Benefitting from global food chains



The Vision 2030 provides a basic framework for developing APAARI Strategic Plan 2017-2022 and future strategies and operational plans of the Association. Whilst the vision outlines the overall goal, mission and vision of APAARI, this Strategic Plan creates a road map through which APAARI and its partners and stakeholders can collectively contribute to the realization of the vision. In particular, it focuses on addressing needs, overcoming challenges and capitalizing on the opportunities described in the Vision 2030. This strategic plan will provide a resource for decision making, funding allocation and activity prioritization. It will also guide the measurement of results and allow for adjustments based on progress against results.

2. Development Context in the Asia-Pacific Region

The APR, with over 4.4 billion people, is home to nearly 60 per cent of the world's population⁴. The region is highly diversified with different levels of economic development, rates of economic growth, per capita income, contribution of agriculture to the economy, agro-ecologies and degree of vulnerability to climatic change. However, some commonalities exist. These include the dominance of smallholder farming, declining availability of fertile lands and water, notable levels of poverty and large productivity gaps.

On 25 September 2015, the international community adopted a new set of goals to end poverty, protect the planet, and ensure prosperity for all as part of the post 2015 sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years. The 17 SDGs build on the work of the Millennium Development Goals (MDGs) but also present a wider agenda that aims to address the root causes of poverty, whilst simultaneously considering environmental protection, gender inequality, human rights and inclusive economic development.

In the APR, rapid economic growth has ensured strong progress against the MDGs. While in 2000 the region accounted for less than 30 per cent of global GDP, by 2014 this figure had risen to almost 40 per cent⁵. By 2015, the MDG-1c target of halving the proportion of undernourished people was met, with the number of undernourished being reduced from 24 per cent in 1994 to 12 per cent in 2015⁶. As a result, national food security has almost been attained and poverty levels have dropped.

Despite this progress however, there are large disparities across the region. Whilst Eastern and South-Eastern Asia have achieved MDG-1c, Southern Asia and Oceania continue to lag behind. Many of the poorest and most vulnerable are still being denied their share of the benefits of strong economic growth⁷ with about 18 per cent of the APR population (or 772 million people) still living on less than USD 1.25 per day. In addition, rising incomes and increased purchasing power are placing pressure on food supplies, driving an increase in income inequality and raising questions of future sustainability.

Malnutrition remains a significant barrier to socioeconomic development in the APR. Despite progress since the implementation of the MDGs, the region is still home to approximately 490 million chronically hungry people, over 60 per cent of the world's undernourished.⁸ In some countries in the region, over 40 per cent of children are stunted, predisposing them to physical and cognitive disability and ensuring the persistence of cyclic poverty⁹. In addition, rapidly changing diets coupled with reduced physical activity has led to over-nutrition and under-nutrition frequently co-existing in the same society (double burden of malnutrition).

⁴United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). 2016. Population dynamics: Challenges and opportunities. Available from: <http://www.unescap.org/our-work/social-development/population-dynamics/about>

⁵IMF Regional Economic Outlook 2015: Asia and Pacific. Stabilizing and Outperforming Other Regions.

⁶FAO Regional overview of food insecurity in Asia and the Pacific 2015.

⁷Ibid

⁸Ibid

⁹Ibid

Gender inequality and disengagement of youth in agriculture persist to hamper rural development efforts. The APR contains close to 60 per cent of the world's youth¹⁰ (750 million young men and women aged 15 to 24 years). Yet most of them engage in informal, unskilled, low-paid rural jobs or migrate from rural areas to cities in pursuit of more attractive employment opportunities. As a result, rural areas are left with an aging and depleted workforce. Women account for close to 50 per cent of the agricultural labour force in East and Southeast Asia, and roughly one third of the agricultural labour force in South Asia¹¹. Despite this, women in the APR have less access to productive resources and opportunities than men, leading to lower productivity that significantly restricts regional food production¹². Social and economic inclusion of women and youth can drive innovation, entrepreneurship and prosperity, and is critical to ensure production of sufficient food to meet global demands.

The region also faces environmental challenges. Population growth and rising incomes have placed pressure on natural resources creating fierce competition for water, land and energy. Deforestation, soil degradation, overfishing and air pollution are emerging issues, which will create future challenges to AFS. The APR is also particularly prone to natural disasters and the negative impacts of climate change.

Other regional AFS challenges include poor productivity, low affordability of food, high food-price inflation and lack of assurance in food safety. Moreover, poor value addition to agricultural commodities and weak linkages between farmers and markets mean that farmers have to operate on small scales, mainly on a subsistence basis. Farmers also have limited technical skills and poor access to information and capacity development to improve their production, processing and marketing practices. The new sustainable development agenda is, therefore, critical to the APR. Since agriculture will continue to remain one of its primary economic sectors, any change in agriculture will impact the socioeconomic development of the region.

Hence, the AFS remains at the centre of the region's key challenges. These challenges, both broadly within the APR and more specifically within the AFS, present numerous opportunities to collectively work towards more sustainable and inclusive development. Because the region is already experiencing economic growth, the key challenge is how to ensure that this growth benefits all people, whilst simultaneously protecting the environment for future generations. GDP growth in agriculture is known to be at least twice as effective in reducing poverty as growth in any other sector,¹³ making investment in agriculture crucial to realizing the SDGs. The Food and Agriculture Organization of the UN (FAO) estimates that yearly investment in agriculture needs to rise by more than 50 per cent to generate the food required for zero hunger in 2050. Of course, investments in agriculture need to be combined with activities in other sectors, such as health and education.

Creating a more sustainable and inclusive AFS requires targeted investment in research and innovation systems. Whilst crop yields are still increasing, the rate of growth is decelerating. In addition, many smallholders are still unable to access input and output markets. Enabling policy and sufficient human capacity are also sub-optimal. Improvement in research and innovation systems is essential in creating a more sustainable and equitable AFS. Only science that can identify the most efficient and sustainable production systems and innovation is paramount to delivering these systems and overcoming the broader challenges facing the APR. Science and technology must be approached collectively, as the challenges described transcend country borders and hence require regional solutions. A strengthened AFRIS will contribute to stronger AFS, contributing to the realization of the SDGs.

¹⁰United Nations (2013) World Population Prospects: The 2010 Revision

¹¹FAO 2010. The state of food and agriculture 2010-2011. Women in Agriculture.

¹²Ibid

¹³World Bank 2008. Agriculture for development report.

3. Strategic Planning Process

The APAARI Secretariat coordinated the development of the APAARI strategy in consultation with a range of stakeholders. Initially, a task team of APAARI staff and consultants was established (Annex 5). An Advisory Group, comprising of representatives of nine APAARI members, was also created. The task team conducted a stocktaking exercise to determine the way forward from the APAARI Vision 2030, developed a framework to guide the strategic planning process, and made plans for needs assessment, stakeholder scoping and mapping, and determination of APAARI value-adding potential. An inception meeting, attended by members of the Advisory Group and the Task Team, was held on 21-22 March 2016 in Bangkok to refine the proposed planning process. Following the meeting, a Core Consultation Group comprised of representatives of 13 member organizations from diverse geographical areas of the Association was formed.

The task team then conducted the needs assessment covering the eight thematic thrusts identified in the APAARI Vision 2030.

- Transforming agriculture and agri-food systems
- Integrating agricultural value chain actors with markets
- Making agriculture knowledge intensive for socio-economic development
- Enabling sustainable use of natural resources, renewable energy and forests/agroforestry
- Managing and controlling the spread of transboundary pests and disease
- Coping with risks and uncertainties in agriculture and agri-food systems
- Investing in capacity development for impact-based agricultural research and innovation (AR&I)
- Improving APAARI's governance and resource mobilization

Part of this process was the decomposition of the thematic thrusts into 14 Themes and identification of needs of AFS within these themes, as well as the implementation focus areas. During this process, implementation focus areas (FAs) were refined into (i) four programmes – knowledge management, partnership and networking, capacity development, and advocacy; and (ii) two crosscutting areas –women and youth and foresight and visioning.

The Themes were prioritized with assistance from stakeholders, keeping in mind areas where APAARI has a comparative advantage. Corresponding development outcomes responding to identified needs of AFS were worked out for each theme and APAARI programme. The online survey used to prioritize these needs was also used to ascertain what APAARI and its partners could contribute through APAARI programmes, in addressing these needs and delivering on the development outcomes. The feedback also helped define areas of comparative advantage and value-adding potential of APAARI.

The advanced consultation on APAARI strategic planning with the core consultation group (including members of advisory group), held on 20-21 June 2016 in Bangkok, and continued inputs from the task team, assisted to further prioritize the Themes and refine draft strategies. The process resulted in the identification of four key Development Themes: i) natural resource management, ii) risk management, iii) integrated value chains, and iv) agricultural policy. The task team then drafted the Strategic Plan based on the results and recommendations from the preceding participatory process.

The draft strategic plan was then circulated among all those involved in the consultation processes, APAARI members, partners and primary stakeholders and any such comments/suggestions received were incorporated to develop advanced version of the Plan. The advanced version was presented and deliberated and approved at the APAARI Executive Committee on 8 September 2016. With further minor modifications, the draft advanced Version was circulated to the APAARI members, including those representatives who were confirmed to participate in the 14th General Assembly Meeting in Taichung.

The GAM held on 3 November 2016 had a passionate deliberation on the Plan, with a number of suggestions arising for further refinements. By considering these suggestions, the Task Team made many refinements. The major improvements included were i) re-specifying and focusing on development themes and development outcomes for APAARI contributions, and ii) giving prominence to specific strategies and indicative activities in the executive summary. Also, the specific statements related to the constitutional reform were explicitly stated to explain how the constitutional changes could be made in accordance with the provision of Article 16 of the APAARI constitution. By considering these refinements and on the basis of majority voice, the members finally endorsed the APAARI Strategic Plan 2017-2022 for implementation.

4. APAARI Theory of Change

APAARI's change strategy is to make a contribution toward the strengthening of AFRIS through enhanced collaboration, facilitation, promotion and advocacy in the region.

APAARI Theory of Change (TOC) is depicted in Figure 1 below, while Annex 1 presents a more detailed TOC as envisaged in the APAARI Vision 2030 and is to be followed through this and subsequent Strategic and Operational Plans. Reflected are a set of strategies and results that respond to current and emerging priority constraints and opportunities in the AFS development in the region as highlighted during stakeholder consultation. Achievement of these results would make a major contribution towards the transformation of AFS and sustainable agricultural development (development outcomes), which is a pre-condition for achieving relevant SDGs. The basic assumption for this TOC is that platform members, partners and key/primary stakeholders effectively use APAARI contributions and all actors align their strategies at the AFRIS level and subsequently at the AFS level for collective action towards the achievement of the desired and agreed development outcomes.

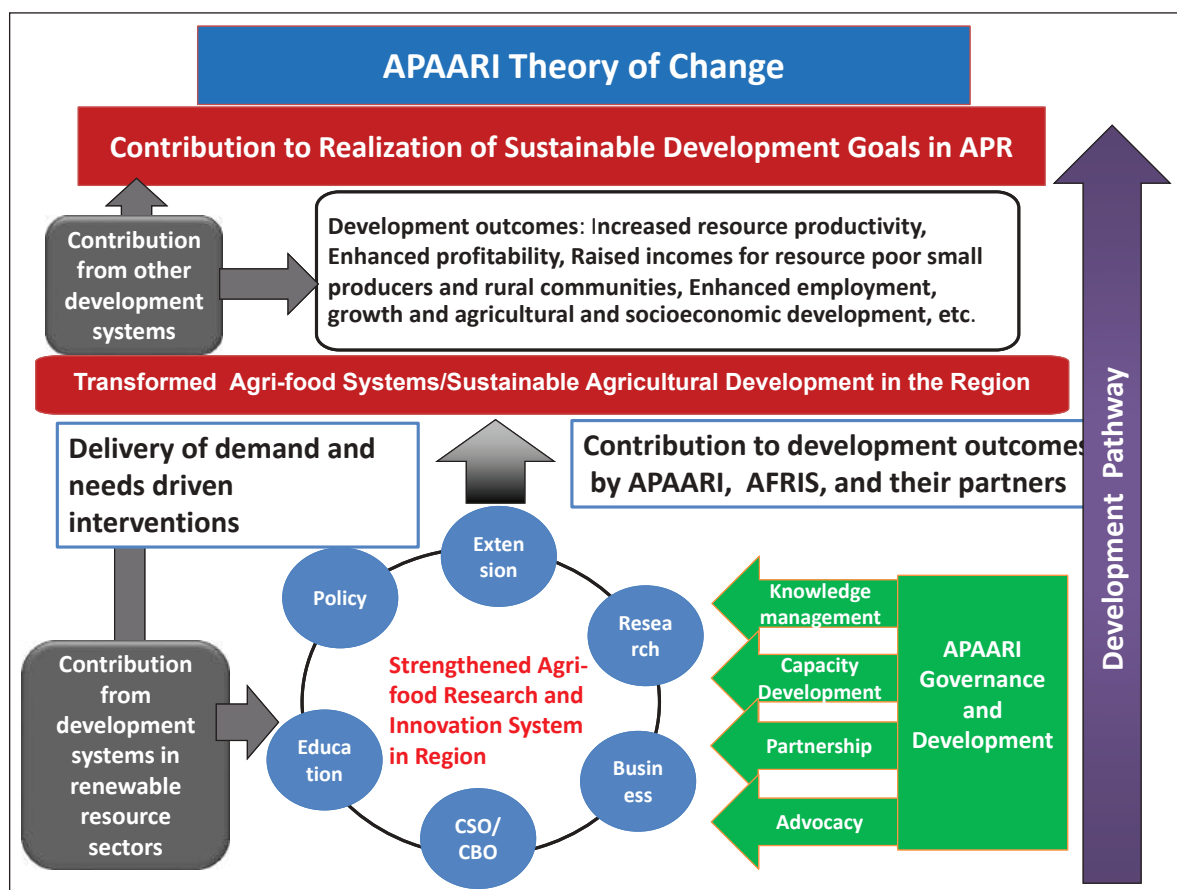


Figure 1. APAARI theory of change

5. Agri-food Systems Development Outcomes

The selected Themes and expected Development Outcomes described below provide APAARI with the focus for developing its portfolio of projects and activities within its four programmes and will allow APAARI to link more effectively into the development pathways. Specific strategies and indicative activities by APAARI and its partners can be found in Annex 2. The delivery of development outcomes under each Theme will require the collective efforts of APAARI, AFRIS and their partners.

Theme 1: Mobilization, management and use of natural resources for sustainability of agri-food systems

In the APR, gaining access to natural resources, such as fertile land, water and energy is becoming progressively difficult. Increased demand for food, driven by population growth, rising incomes and urbanization has further exacerbated this pressure. Production inefficiencies and waste add to the problem. APR now uses three times more natural resources per unit of gross domestic product (GDP) than the global average¹⁴ and land degradation and water scarcity are worsening. This context gives rise to a need to effectively manage and use land, water and energy resources for sustainable production, productivity and environmental protection. This requires the following key development outcomes under Theme 1.

- 1.1 Land and water resources are managed and used effectively for sustainable productivity and environmental protection.
- 1.2 Forests, agro-forestry and trees are utilized and integrated for the transformation and development of agri-food systems.
- 1.3 Agrobiodiversity is effectively managed and utilized for increased agricultural productivity, efficiency and sustainability.
- 1.4 Biotechnologies and related regulatory systems are promoted and applied for improved productivity, nutritional quality, and sustainability of agri-food systems.
- 1.5 Systems of sustainable generation and use of energy, including bioenergy and biomass are designed and adapted to local conditions.

Theme 2: Management of risks and uncertainties in the agri-food system

Risk and uncertainty are quintessential features of agriculture. Risk in AFSs emerges when alternative outcomes or conditions with probabilities exist. Primary sources include production risk, price risk, market risk, financial risk, institutional risk and environmental risk. Specific examples include weather, price fluctuations and change in government policy. The APR is particularly vulnerable to natural disasters, creating greater risk in agriculture specific to this region. This context gives rise to a need to develop policies and strategies for managing and coping with risks and uncertainties in the agricultural sector. This requires the following key development outcomes under Theme 2.

¹⁴UNEP 2013, Recent Trends in Material Flows and Resource Productivity in Asia and the Pacific.

- 2.1 Policies and strategies for managing (minimizing) price and market risks in agriculture and agri-food systems are developed and adapted.
- 2.2 Tools for coping with uncertainties arising from the effects of climate change, sea level rise, natural disasters and man-made catastrophes are developed and improved.
- 2.3 Systematic processes of and partnerships in biosecurity at borders and on farms in preventing and managing the spread of transboundary pests and disease are developed.

Theme 3: Inclusive development and integration of value chains targeted at benefiting smallholders

Economic growth, urbanisation, globalization, reduction of state intervention and import barriers have contributed to expanding domestic and international markets for agricultural commodities in the APR. Changes in food preference toward high value and processed products, present new opportunities for smallholders and have created more complex agricultural supply chains. However, in most countries of the region, smallholder producers have poor access to output markets and are therefore excluded from reaping the economic benefits of these new chains. Inputs and services are often unavailable or unaffordable to smallholders. Important to value chains is the loss of primary produce along the chain, both during and after harvest that continues to restrict the economic benefits that can be gained from agricultural production. Lastly, in many areas youth are disengaged with agriculture. This context gives rise to two needs; to integrate smallholder producers into value chains and to minimise loss during harvest and post-harvest value chain processes. This requires the following key development outcomes under Theme 3.

- 3.1 Small producers, rural communities and women are integrated with other value chain actors so they contribute and receive the benefits of integrated markets.
- 3.2 Innovative best practices for reduced harvest and postharvest loss and wastage are applied and integrated.
- 3.3 Smallholder agriculture is integrated into manufacturing and service sectors, especially agro-industries, agri-business and agri-services to ensure employment for rural communities.

Theme 4: Analysis, strengthening and formulation of public policy and overarching regulatory frameworks to support the transformation and development of agri-food systems

Efficient systems of pricing, financing, taxation, services, resource management and marketing are an integral part of transforming AFS for sustainable agricultural growth and development. These systems need to be supported by evidence-based policies and strategies that consider national circumstances with a view to create comparative advantage at a national level and overall growth and sustainable development at a regional level. This context gives rise to the need to design and implement policies and strategies to boost efficient agricultural growth and development. This requires the following key development outcomes under Theme 4.

- 4.1 Research into policy, socioeconomics and markets is supported to assist with developing and implementing policies and strategies to increase agricultural growth and development.
- 4.2 Policies and strategies for accessing and mobilization of land and water resources by smallholder producers and landless rural communities are developed and adopted.

6. APAARI Programmes and Strategies

APAARI's programmes – knowledge management, partnerships and networking, capacity development and advocacy - and its cross-cutting areas – women and youth, and foresight and visioning are aligned with four Themes and their Development Outcomes, and it is through these programmes that APAARI seeks to strengthen AFRIS. The key strategies, indicators of success, specific strategies and indicative activities for each programme area are listed below.

6.1 Knowledge Management

Asia-Pacific agri-food systems are increasingly dependent on the use of knowledge to strengthen innovation processes, such as technology generation, adaptation, and application. Stronger processes for collecting, analysing, organizing, accessing, using and sharing scientific information for knowledge creation, problem solving and decision making are required. Combined with partnership and networking, capacity development and advocacy, knowledge management can better facilitate engagement and collaboration that contribute to improved scaling up and out of successful agricultural practices, enhanced agricultural investment, and a higher level of trust among stakeholders.

APAARI strives to use improved knowledge management as an overarching programme to strengthen AFRIS and is well positioned to do so. Through collective action, APAARI has a critical role in informing strategic investments, policies and programmes that can develop the regional knowledge base as an essential foundation for sustainable transformation of agriculture and AFS. APAARI intends to contribute to knowledge management through the following strategies (Table 1).

Table 1. Knowledge management

Key Strategy 1.1 AFS made more knowledge intensive to effectively contribute to sustainable agricultural development	
Indicators of Success - Increased access by primary stakeholders to knowledge on AFS - Improved use of tools and processes, including ICTs, within AFS	
Specific strategies	Indicative activities
1.1.1 Promote processes for knowledge sharing, learning and collaboration between primary stakeholders	- Coordinate face-to-face interactions - Facilitate participation of primary stakeholders in regional and global events - Share timely information on learning opportunities among primary stakeholders
1.1.2 Promote tools for enhanced knowledge sharing, learning and collaboration	- Revamp the APAARI website and social media tools by updating and organizing content - Create new tools for knowledge sharing, learning and communication e.g. online discussions - Link with knowledge tools of members and partners to enable increased outreach

1.1.3 Promote innovative ways to use Information and Communication Technology (ICTs) in AFS	• Share solutions and experiences in using ICTs in agri-food systems for faster scaling up e.g. through workshops, meetings, policy dialogue and online tools • Facilitate participation of primary stakeholders (including the private sector) in ICT-related activities (including e-agriculture)
Key Strategy 1.2 AFRIS strengthened through more effective knowledge management	
Indicators of success: • Increased access by primary stakeholders to knowledge on natural resources, risks and uncertainties, integration of value chains, and women/youth involvement in e-agriculture and agro-tourism using innovative tools and processes • Increased application of innovative knowledge-sharing and learning processes amongst APAARI primary stakeholders • Improved capacity in knowledge management to enhance the management of natural resources, risk, agricultural policy and integration of value chains • Improved evidence base for decision making	
Specific strategies	Indicative activities
1.2.1 Enhance knowledge sharing and engagement to enable faster technology, innovation and policy development	• Facilitate face-to-face and on-line meetings for knowledge sharing and engagement • Make knowledge-sharing and learning processes in face-to-face and online meetings more interactive and learning oriented through innovative methodologies • Facilitate engagement between farmers, scientists and policymakers to enrich policy debate • Host multi-stakeholder consultations on technology and innovation
1.2.2 Develop skills and capacity of stakeholders in knowledge management	• Train and mentor primary stakeholders on the use of social media • Train and mentor primary stakeholders in generation, processing and packaging of knowledge for different audiences (e.g. policy briefs and fact sheets)
1.2.3 Improve scientific data management to make it available for analysis and knowledge creation	• Support projects that improve data collection for research, compilation, management, analysis, evaluation and application, e.g. Agricultural Science and Technology Indicators (ASTI) Project • Collect, compile and manage data on agri-food research and innovation • Disseminate data and analysis through APAARI and websites of members and partners • Improve APAARI publication quality, relevance, packaging and outreach

6.2 Partnership and Networking

The transformation of AFS and the realization of SDGs cannot be achieved by APAARI alone. Multiple organizations from private, public and civil sectors need to be comprehensively linked at local, national, sub-regional, regional and global levels to bring about large-scale change. APAARI is well positioned to connect national bodies to each other, regional and global fora, fostering partnerships and networking through face-to-face events and online communities. APAARI intends to contribute to partnership and networking through the following strategies (Table 2).

Table 2. Partnerships and networking

Key Strategy 2.1 Innovative and strategic partnerships and networking strengthened	
Indicators of success: - Increased technical cooperation in improving land and water management technologies, agro-forestry systems, underutilized species and biotechnology - Improved public-private-community partnerships in the use of renewable energy - Application of public insurance for coping with uncertainties explored - Increased networking at sub-regional, regional and global levels to enhance the management of price risks and transboundary diseases - Current and new stakeholders mobilized into collective action in agri-food research and innovations - Improved partnership with sub-regional and regional organizations for development outcomes - Increased networking with regional and global multi-sector development partners	
Specific strategies	Indicative activities
2.1.1 Facilitate technical cooperation in key themes	- Initiate and implement strategic partnerships in TAs for effective resource mobilization, policy support, knowledge generation, and technology transfer - Coordinate the development of joint partnership proposals
2.1.2 Develop public-private-community partnerships to improve efficiency of adaptation and application of agricultural technologies and innovations	- Bring public, private and community sectors to expert consultations and policy dialogue - Facilitate engagement between public, private and community stakeholders
2.1.3 Facilitate networking and collaboration between national, sub-regional, regional and global-level organizations within AFS	- Facilitate engagement of national stakeholders at regional and global events - Promote engagement of national stakeholders in existing agri-food networks
2.1.4 Facilitate partnership with sub-regional and regional organizations	- Create new ways of coordinating and delivering support to AFRIS through sub-regional organizations, such as ASEAN, SAARC and SPC - Facilitate collective development actions through regional organizations, such as ADB, APEC, UNESCAP and FAO

2.1.5 Facilitate networking and collaboration between AFS and regional and global multi-sector development partners to collectively work towards development outcomes	● Facilitate engagement with regional and global partners working in development sectors such as health, rural development, infrastructure and finance ● Promote partnership with regional and global initiatives, such as G20, The World Economic Forum, Committee on World Food Security, COP 21 and GCARD ● Encourage stakeholders to engage in existing regional and global multi-sector networks
2.1.6 Scope and map primary stakeholders to enable better targeting and stronger engagement in collective action in terms of sharing of benefits, efforts and resources	● Identify and assess potential stakeholders and their possible contribution to and benefits from strengthened agri-food research and innovation system ● Assess the contribution from and benefits to APAARI members, partners and stakeholders

APAARI has developed a stakeholder scoping and mapping approach to determine its primary stakeholders and their potential contribution to and benefits from the Association. The scoping and mapping exercise identified about 300 primary stakeholders of APAARI. These include NARIs, NAROs, policy bodies, global fora, regional and sub-regional organizations, higher education, CGIAR centres, AIRCA, international development organizations, civil society – NGOs and FOs, women and youth organizations, and the private sector. Using two approaches – online stakeholder survey and website research – these stakeholders have been mapped according to their potential contribution to the collective actions of strengthening AFRIS, and matched with the value-adding potential of APAARI. Annex 3 presents the different categories of APAARI's stakeholders and their potential partnership with APAARI. Further scoping and mapping for the actual engagement of partners will be undertaken as an integral part of planning and implementation of the biennial operation plans.

6.3 Capacity Development

Capacity is the ability of the individual or group to perform their responsibilities. It depends not only on the capabilities of the people, but also on the overall size of the task, the resources needed to perform them, and the framework within which they are discharged¹⁵. For effective and timely development outcomes, the transformation of AFS in the APR needs to be built on scientific advances, improved and validated technologies and adoption at scale. This can only be achieved by developing and strengthening capacity at three levels; individual, organisational and institutional capacity. This and other key concepts and principles are set out in the Common Framework on Capacity Development for Agricultural Innovation Systems developed and endorsed by the partners of the Tropical Agriculture Platform, amongst them APAARI¹⁶.

APAARI is well positioned to contribute to strengthening capacity by working with its members, partners and other stakeholders to collectively identify and improve individuals, organisations and institutions in areas where capacity is lacking. APAARI can provide opportunities for connecting organisations to each other through learning so regional challenges can be overcome collectively. APAARI intends to contribute to capacity building through the following strategies (Table 3).

¹⁵Strengthening Voices for Better Choices, IUCN, 2009, https://cmsdata.iucn.org/downloads/capacity_needs_assessment.pdf

¹⁶<http://www.fao.org/in-action/tropical-agriculture-platform/commonframework/en/>

Table 3. Capacity development

Key Strategy 3.1 Institutional arrangements for effective delivery of outcomes from AFRIS strengthened	
Indicators of success - Improved understanding of principles and concepts related to capacity development for agricultural innovation systems - Improved policy design for enabling agri-food research and innovation development - Improved standards and regulations in priority areas of agri-food research - Enhanced institutional management - More effective sharing of expertise in technical and managerial areas	
Specific strategies	Indicative activities
3.1.1 Strengthen institutional capacity for the development of agri-food research and innovation system	- Conduct meetings, workshops and dialogue to improve AFRIS to plan and manage their operations efficiently and effectively - Use online and face-to-face interactions to create a culture of discussion and communication amongst members, partners and other stakeholders - Encourage the sharing of resources – knowledge, human, technical and financial – to strengthen institutional arrangements, efficiency and effectiveness - Share successful models to reinforce capacity in leadership, governance, transparency, accountability, integrity and human resources
3.1.2 Strengthen databases on human capacity to enhance sharing of talent pool in the region	- Create or improve existing databases - Strengthen link between existing human resource databases - Share opportunities for training, scholarships, exchange programmes and positions among primary stakeholders - Facilitate sharing of expertise among primary stakeholders
Key Strategy 3.2 Organizational capacity for good governance, effective management and delivery of research and innovations enhanced	
Indicators of success - Improved capacity of research managers and policy makers in planning, monitoring, evaluation and impact pathways - Improved leadership, governance, transparency, accountability, enabling infrastructure, knowledge management, partnership, networking, advocacy and human resources - Increased number of researchers from small-island, mountainous countries and emerging organizations benefiting from capacity development events - Improved skills of policymakers in designing policies - Enhanced knowledge and research competency for developing/adapting technology options	
Specific strategies	Indicative activities
3.2.1 Improve capacity of leaders and research managers in monitoring, evaluation and impact pathway analysis	- Coordinate training programmes on planning, M&E and impact pathways - Develop and share guidelines on M&E and impact pathways

3.2.2 Develop and use improved skills and competency in managerial and organizational roles	• Coordinate training in leadership, management, governance, transparency, accountability, enabling infrastructure, communication, advocacy, and human resources • Train researchers in designing policy briefs based on results from socio-economic and policy research • Develop and share guidelines
3.2.3 Develop basic skills and competency of researchers in small, island and mountainous countries, and new/emerging organizations	• Create learning opportunities for small, island and mountainous countries and new/emerging organizations • Facilitate participation of disadvantaged stakeholders in training programmes • Provide/facilitate post-training mentoring
3.2.4 Address organizational capacity development needs in knowledge management, partnership and networking and advocacy	• Facilitate training, consultations and publications to develop organizational capacity in knowledge management, partnership, networking and advocacy

Key Strategy 3.3 Technical competency developed

Indicators of success

- Improved practices in conservation agriculture (CA), conservation and use of neglected species, options for recycling agricultural biomass, coping with uncertainties, and cost-effective inputs and services for primary production
- Improved regional cooperation in agrobiodiversity, integration of value chains, cost-effective production of inputs and services, and trans-boundary diseases
- Improved policies in land and water resources, market integration and biotechnology

Specific strategies	Indicative activities
3.3.1 Build capacity of researchers and policy makers in technical areas	• Coordinate training in conservation agriculture, conservation and use of neglected species, options for recycling agricultural biomass, coping with uncertainties and/or cost-effective inputs and services for primary production • Facilitate policy dialogue on land and water resources, market integration and biotechnology • Organize expert consultations on developing/adapting options for improved land and water management, agro-forestry, on-farm conservation of underutilized crops, biotechnology, recycling agricultural biomass, climate-smart technologies and/or on-farm harvest and postharvest strategies
3.3.2 Improve collaboration in areas requiring regional cooperation	• Organize policy dialogue on standards and regulations on agrobiodiversity, integration of value chains and/or cost-effective production of inputs and services • Facilitate sharing of expertise in technical and managerial areas, such as managing agrobiodiversity and transboundary pests and disease

6.4 Advocacy

Economic growth originating from agriculture has been shown to be 2-4 times more effective at reducing poverty than growth originating from other sectors¹⁷. Despite this trend, in the regions where hunger and poverty are the most widespread today, there are declining or stagnant levels of investment in agriculture. FAO estimates that an additional investment of USD 83 billion annually will be required globally to close the gap between what low and middle income countries have invested each year over the last decade and what is needed by 2050¹⁸. In other words, investment needs to rise by more than 50 per cent. Increasing investment and improving understanding on the crucial role of agri-food research and innovation in development requires advocacy.

APAARI can play a role in advocating for investment in agricultural research. Advocacy in the agricultural sector cannot be left to a single organisation or individuals within it. Advocacy requires collective action at a regional level. APAARI is well positioned to lead this coordinated action.

APAARI intends to contribute to advocacy through the following strategies (Table 4).

Table 4. Advocacy

Key Strategy 4.1 Understanding of the role of agri-food research and innovations in AFS and socio-economic development improved	
Indicators of Success - Increased political awareness of the importance of agrobiodiversity, renewable energy, community rights to natural resources, biotechnology, food safety and making agriculture attractive to youth - Increased engagement of disadvantaged stakeholders in the AFS in regional and international forums - Improved advocacy amongst primary stakeholders - Social and broadcast media are effectively used to support advocacy efforts	
Specific strategies	Indicative activities
4.1.1 Increase political recognition of the role of agri-food research and innovation as a major driver of socio-economic development	- Systematic monitoring contribution of agri-food research and innovation to socio-economic development - Conduct studies and policy research on issues related to agri-food research and innovation - Share results with policymakers through events, online and publications, and policy briefs
4.1.2 Improve the voice and engagement of disadvantaged stakeholders involved in AFS	- Improve representation of disadvantaged stakeholders in regional events - Provide face-to-face and online opportunities to share issues and success stories of disadvantaged stakeholders - Facilitate documentation and dissemination of experiences of disadvantaged stakeholders within the network

¹⁷World Bank 2008. World Development Report 2008. Agriculture for Development

¹⁸FAO 2013. Trends and impacts of foreign investment in developing country agriculture Evidence from case studies

4.1.3 Strengthen capacity for advocacy	• Develop an advocacy kit • Provide training opportunities on different advocacy tools
4.1.4 Engage social and broadcast media to strengthen advocacy efforts	• Ensure participation of journalists from key national, regional and/or global media in every APAARI-supported event • Promote APAARI events through social media • Encourage primary stakeholders to use APAARI blog for greater outreach
Key Strategy 4.2 Investment in agri-food research and innovations improved for development of AFS	
Indicators of success • ASTI project implemented effectively • Increased knowledge and awareness of agri-food stakeholders and policy makers on need, scope and return of investment in AFRIS • Improved evidence-based decision making on investment in AFS • Established and effectively used advocacy toolkit and resource group on promoting increased investment • Skills and capacities in mobilization of funding enhanced • Innovative funding and partnership mechanisms adopted	
Specific strategies	Indicative activities
4.2.1 Enhance understanding of agri-food stakeholders and policy makers on the need, scope and return of improved investment	• Use events, policy dialogue and communication campaigns to sensitize agri-food stakeholders and policy makers on the need, scope and return (actual and potential) of improved investment • Facilitate socio-economic and policy studies
4.2.2 Assess the status, trend and priority for investment, and use the data and information for policies and strategies to attract investment and improve decision making	• Plan and implement the ASTI project • Assess and use investment data for improved advocacy efforts • Help stakeholders in prioritizing investment options
4.2.3 Develop advocacy tools and on-going dialogue on promoting investment	• Develop advocacy tools, such as policy briefs and fact sheets, to promote improved investment • Develop advocacy toolkit • Establish a resource group (with expertise in select areas) to facilitate dialogue on improved investment
4.2.4 Assess and develop skills and capacities for mobilizing investment	• Coordinate training on mobilizing investments • Develop guidelines to feed into the advocacy toolkit
4.2.5 Assess and adopt innovative funding and partnership mechanisms	• Document and share experiences with innovative funding and partnership mechanisms in APAARI-supported events • Initiate innovative partnerships e.g. with the private sector, regional and sub-regional organizations

Cross-Cutting Areas

6.5 Women and Youth

Agriculture is underperforming in many Asia-Pacific countries and one of the reasons for this is the “gender gap” in agricultural productivity. Across the Asia-Pacific, women are producers and entrepreneurs, but almost everywhere they cannot access productive resources, markets and services as easily as their male counterparts¹⁹. This hinders their productivity and reduces their contribution to the agriculture sector and to the achievement of broader economic and social development goals²⁰. Women are also underrepresented in agricultural research and forums for decision making.

Over 20 per cent of the Asia-Pacific population are youth²¹ and although only one in five workers are between the ages of 15 and 24, this group accounts for almost half the region’s jobless²². Employment and entrepreneurial opportunities for young people, especially those in rural areas are limited and most of the jobs available are poorly remunerated and generally unattractive to young people. Young people are also underrepresented in decision making.

APAARI recognizes the lost opportunities created through the gender gap and the disengagement of rural youth in agriculture. Women are talented farmers, entrepreneurs and scientists and youth have enthusiasm and inherent aptitude for technology adoption and innovation. These attributes are being underutilized. APAARI can be a forum where women and youth can have their voices heard and make a bigger contribution through the following strategies (Table 5).

Table 5. Women and youth

Key Strategy 5.1: Women and youth are engaged in productive and rewarding activities in AFS	
Indicators of success - Improved participation of women and youth in productive and rewarding activities - Increased number of women and youth with skills and expertise in value addition, agri-food research and extension, entrepreneurship, ICT and KM	
Specific strategies	Indicative activities
5.1.1 Strengthen the engagement of women and youth in agricultural value chains, agri- industries, businesses and services to enable them to receive a higher share of benefits from integrated markets	- Document and share success stories on value adding activities that are attracting women and youth - Involve more women and youth in expert consultations related to value chains - Promote the engagement of women and youth through publications, communication campaigns and social media

¹⁹FAO 2010. The state of food and agriculture 2010-2011. Women in Agriculture.

²⁰Ibid

²¹Population Reference Bureau, 2013. The world’s youth data sheet.

²²The youth employment challenge in Asia and the Pacific. International Labour organization. http://www.ilo.org/asia/decentwork/adwd/WCMS_098114/lang-en/index.htm

5.1.2 Improve opportunities for women and youth in agri-food research profession	- Promote research scholarships and other work opportunities for women and youth - Involve more women and youth in analytical work - Promote success stories about women and youth working in AFRIS - Provide/facilitate employment opportunities for women and youth in APAARI
5.1.3 Build capacity of women and youth in value addition, agri-food research and extension, entrepreneurship, ICT and KM	Coordinate training for women and youth in value addition, agri-food research and extension, entrepreneurship, ICT and KM
Key Strategy 5.2: Women and youth are appropriately represented in policy and decision making in AFS	
Indicators of success: - Increased representation of women and youth organizations at national and regional events. - Increased representation of women and youth in APAARI's strategic meetings	
Specific strategies	Indicative activities
5.2.1 Strengthen organizations of women and youth at national and regional levels to give them greater voice	- Create opportunities for women and youth to engage in regional and global dialogue - Encourage women and youth to learn and share experiences at consultations, meetings and policy dialogue - Collect gender and age disaggregated data on participants at capacity development events
5.2.2 Ensure inclusive representation of women and youth in APAARI	- Recognise and include women and youth as active members of APAARI - Include women and youth in APAARI governance and policy decision making - Create balanced involvement of women and youth in APAARI Secretariat

6.6 Foresight and Visioning

Foresight and visioning will allow APAARI to analyse changes in the development context, trends, challenges and opportunities emerging over time and space and adjust its priorities and Implementation plans accordingly. This realignment will occur through on-going foresight and visioning exercises. Such exercises will also encourage innovation and analysis that can be turned into actions to effectively address the future development of AFS. These will focus on themes and APAARI programmes and will also include the community-based foresight and prioritization of regional needs to set the agenda for collective action.

Table 6. Foresights and visioning

Key Strategy 6.1 Developments, trends and changing needs that may impact on the realization of Vision 2030, are continuously monitored and evaluated and turned into actions

7. APAARI Governance and Development

Good organizational governance and continual efforts to develop the capacity and effectiveness of APAARI will drive the results sought and described in this strategic plan and help fulfil the ambitions set in the APAARI Vision 2030.

This will require appropriate refinements in APAARI governance and increased capacity in securing and managing resources, which include financial, material, human and partnerships. To strengthen its capacity APAARI also needs to improve its management systems with a special focus on planning, monitoring and evaluation, and decision making through relevant policies and management standards. Stronger governance will be pursued through the strategies outlined in Table 7 below.

Table 7. APAARI governance and development

Key Strategy: APAARI is efficient and effective in contributing to strengthening of AFRIS in the APR
Indicators of success • APAARI is effectively implementing its strategic and biennial operational plans • A high level of governance is established through transparency and accountability • There is apt prioritization and efficient implementation producing development oriented results • APAARI consists of a responsive portfolio of work for strengthening AFRIS • APAARI is perceived as an effective knowledge broker within AFRIS • Women, youth and civil society organizations (CSOs) are involved in APAARI as members and stakeholder • APAARI's constitution is reformed when necessary as per the provision of Article 16 of the APAARI Constitution
Specific strategy 1. Develop and effectively utilize the human capacity of the APAARI Secretariat
Indicative activities • Acquire and develop human talent in accordance with strategic priorities • Utilize human talent mobilization activities, such as exchange, secondment, in-service training, and graduate training
Specific strategy 2. Effectively mobilize and utilize APAARI's financial and material resources
Indicative activities • Mobilize funding through current and new partnerships, rationalized membership subscriptions, programme/project specific contributions, endowment funds, aid-donor funds, internal revenues, and optimal use of reserve funds • Develop partnership and engagement strategy and standard to guide APAARI in resource mobilization efforts • Rationalize allocation of funding in accordance with strategic priorities

Specific strategy 3. Develop APAARI Secretariat competency in APAARI Programmes – Knowledge Management, Partnership, Capacity Development and Advocacy

Indicative activities

- Continually review APAARI programmes to align with sub-regional and regional priorities
- Support existing staff to participate in professional development and training related to the programme activities
- Mobilize and consider funding and partnership resources when planning activities and projects
- Scope and map stakeholders on a regular basis to enable better targeting and stronger engagement in collective actions

Specific strategy 4. Implement a PM&E and outcome assessment system at all levels

Indicative activities

- Develop results-oriented plans responding to strengthening needs of AFRIS.
- Develop and implement effective PM&E systems for performance assessment of APAARI programmes
- Develop PM&E systems for effective assessment of APAARI contributions to development outcomes

Specific strategy 5. Develop effective leadership and management, incorporating appropriate systems, structure and processes

Indicative activities

- Refine policies and management standards for management of resources, including financial human and partnership
- Develop an enabling environment within the association for efficiency and effectiveness in delivery of results
- Apply principles of transparency, accountability, prudence and due diligence in all APAARI operations

Specific strategy 6. Reform APAARI to deliver on APAARI's mission and vision

Indicative activities

- Build an inclusive environment with more stakeholders and wider representation as members and partners of the association
- Focus on women, youth and CSOs that represent small producers, as members and partners of the association
- Rationalize representation of membership in governance and decision making on the basis of equity
- Assess and refine decision making and governance mechanism of APAARI to maximize efficiency
- Change/amend APAARI constitution when necessary in accordance with the provision of Article 16 of the Constitution to deliver on APAARI mission and vision

8. Planning, Monitoring and Evaluation System

As suggested in Vision 2030, APAARI views the development and implementation of an effective PM&E system as an important part of the implementation of the Strategic Plan. This arrangement and the required capacity need to be progressively developed as the Strategic Plan is implemented through biennial operational plans. Therefore, one specific strategy under APAARI governance and development is devoted to the implementation of PM&E.

Most actions of APAARI towards planned outcomes depend on collective actions by its partners and collaborators. APAARI governance and development is the only area that the Association can implement on its own. Therefore, the PM&E system should be based on and conditioned by the extent and effectiveness of contributions by APAARI partners and other stakeholders.

Previous sections describe the Association's actions at three levels, Themes, APAARI programmes, and APAARI governance and development. Themes provide the association and its partners with direction on where they can best contribute to development outcomes. APAARI programmes show how the core mandated functions of the Association, can contribute to the development outcomes. The strategies under APAARI governance and development suggest how APAARI needs to change in order to contribute more effectively in strengthening of AFRIS.

Based on the themes, programme areas and APAARI governance, a results framework for the Strategic Plan 2017-22 is shown in Annex 4. The framework will be based on the results framework and can be constructed and refined progressively as APAARI and its partners plan and begin implementation of the SP through biennial operational plans.

APAARI will develop biennial PM&E plans consistent with respective biennial operational plans (covering projects and events), having quantitative and qualitative performance indicators on activities, inputs, milestones and outputs. These indicators will be based on Specific, Measurable, Achievable, Realistic and Time-bound (SMART) criteria with adequate flexibility, including appropriate allowances for changes in available resources, assumptions and risks. The outcomes from projects and events within operational plans and across operational plans will be consolidated to assess their contributions to the development outcomes. This process will allow the on-going refinement and adjustments to the M&E framework at the SP level. The Executive Committee will guide the process for selecting performance indicators. Basic information will be collected periodically from members and partners, beginning with a baseline survey at the early stage of the implementation of the Strategic Plan.

The M&E plan will also contain a schedule of annual and mid-terms reviews coinciding with meetings of the Executive Committee/ General Assembly to critically assess the implementation progress of the Strategic Plan and adjust priorities in response to changes in the operating environment. Such changes will be reflected in biannual operational plans.

The results of the M&E system will be assessed and reported through annual, biennial, mid-term and final reports, shared among the APAARI members, AFRIS, partners and stakeholders. Results will be the basis for prioritization and further planning.

Towards the end of the timeframe for this strategic plan, APAARI will commission a set of external reviews and outcome assessments to provide essential information for the development of the next strategic plan under the framework of the Vision 2030.

In order for this PM&E system to be effectively managed and implemented, APAARI will require a specialist M&E Evaluation and Quality Assurance Officer.

9. Way Forward

Successful implementation of the APAARI Strategic Plan 2017-22 will depend on effective partnership and cooperation between APAARI, agri-food research and innovation organizations, and primary stakeholders. To forge such effective partnerships, APAARI will need to embark on a series of awareness activities about the importance and scope of strengthening AFRIS for the development of AFS. The intent should be to help AFRIS and partners not only to engage and participate in collective efforts but also to mobilize partnership support from many organizations involved in the AFRIS.

In the process of delivering the development outcomes, the plan has made a number of assumptions (refer to Annexes 1 and 4) under which it will be possible to successfully implement APAARI strategies. These assumptions, if found untrue, may be a source of significant risk, causing disruption, delay and even failure in realizing outcomes in a timely manner. Therefore, such risks need to be objectively assessed and appropriate risk management actions be implemented in a progressive and anticipatory manner.

The Strategic Plan has emphasized several key strategies, specific strategies and indicative activities under both themes and programmes. However, the plan excludes the scheduling of strategies through projects and events. Scheduling is not possible in the absence of information on funding, partnership and commitment and willingness to engage. Early efforts will be required to evaluate the availability of resources and commitments so that activity scheduling can be reflected in biennial operational plans.

It is fundamental and necessary that early changes in APAARI governance and development take place, as the basic and major driver under the Association's control and influence. Key areas of such change include having participatory stakeholder involvement, a reformed constitution, and enhanced human and funding resources at the APAARI secretariat. These activities are expected to lead to positive changes within and outside the Association, and among the partner organizations.

A key area in the implementation of the Strategic Plan is its PM&E. Effective PM&E will require baseline information on strategic aspects of APAARI functioning, including membership, outcomes of programme activities, resources, management standards, governance and decision-making protocols, as well as the extent of networking. Baseline information will be compared with follow up monitoring and outcome assessments during the implementation of the APAARI Strategic Plan 2017-22.

APAARI will plan its strategies in cycles of six years beginning with this Strategic Plan 2017-22. In addition to the Vision 2030 and strategic plans, APAARI will develop biennial operational plans which will be guided by the Strategic Plan and the subsequent plans that will follow beyond 2022. Biennial operational plans will be the basis for implementation.

APAARI recognizes that as the context of AFS is changing, so are the needs and challenges, requiring adjustment over time. This realignment need to be undertaken with the help of foresight and visioning exercises on an on-going basis.

The APAARI Strategic Plan 2017-22 is a starting point for many subsequent actions of the Association in shaping APAARI for delivering on its Vision 2030. APAARI core values of visionary, excellence, learning and growing, inclusiveness and accountability, will continue to serve its members, partners and other stakeholders. This will help ensuring commitment to the highest level of professionalism to strengthen AFRIS in Asia and the Pacific and thus contributing to the realization of Sustainable Development Goals.

Annex 1. APAARI contribution to development outcomes – APAARI theory of change

APAARI contributing to development outcomes leading to achievement of SDGs in Asia and the Pacific (APR)			
Outcome level	Results	Other contributors	Assumptions
Realized sustainable development agenda in APR			
Sustainable Development Goals	• Reduced hunger and malnutrition • Reduced food losses and waste • Eradicated extreme poverty • Reduced all forms of poverty • Improved and sustained environment	National, sub-regional, regional and global public-private-communities working towards SDGs in and for APR	The APR delivers on achieving other areas of SDGs.
Transformed and developed agri-food systems towards sustainable agricultural development			
AFS Development Themes	• Increased availability of sustainable agricultural inputs • Increased generation and utilization of renewable energy (including bioenergy) • Increased resource (including bio-resource) productivity and profitability • Enhanced environment and tourism services • Raised real incomes for small producers and rural communities • More rewarding and attractive employment for women and youth • Affordable, safe and nutritious food are utilized and consumed • Enhanced employment, growth and socioeconomic development	Sectors broadly relevant to development of agri-food systems such as IT, financial institutions, health, education, infrastructure, power and energy, tourism and the environment	Relevant sectors engage, and contribute effectively to collective efforts.

Strengthened agri-food research and innovation systems			
Agri-food Research and Innovation Systems	- Effectively delivered research and innovation with impact at scale - Added value, reduced loss and increased benefits for primary producers - Enhanced productivity and sustainability of natural resources in AFS - Enhanced agricultural productivity and quality outputs of bio-resources - Improved efficiency, productivity and sustainability of AFS - Increased availability of affordable, safe, nutritious and healthy foods - Enhanced benefits to small producers, rural communities, and women and youth	Sectors directly relevant to strengthening AFRIS such as rural development, science and technology, manufacturing, agri-industries, community development, trade, business, forestry, fisheries, livestock and agriculture and stakeholders	Relevant sectors engage and contribute effectively to collective efforts.
Effective promotion, coordination and strengthening of agri-food research and innovation systems delivered by APPARI, AFRIS and partners			
APAARI Programmes	- Strengthened knowledge management and sharing - Stronger partnerships and networks - Increased (human, organizational and institutional) capacity - Increased understanding and investment in AFRIS - Greater representation and engagement of women and youth - Sustainable natural resource management - Improved risk management - Enhanced integrated value chains - Effective public policy and enabling environment	APAARI, AFRIS, partners and targeted stakeholders	Adequate human, financial and partnership resources contributed effectively by APAARI stakeholders. National, regional and global partners actively engaged in APAARI activities.

APAARI is efficient and effective in contributing to strengthening of AFRIS			
APAARI Governance and Development	• APAARI's vision, mission and goal is updated • APAARI is effectively implementing its strategic and biennial operational plans. • A high level of governance is established through transparency and accountability • There is apt prioritization and efficient implementation producing development oriented results • APAARI has a responsive portfolio of work for strengthening AFRIS • APAARI is perceived as an effective knowledge broker within AFRIS • Women, youth and CSOs are involved in APAARI as members and stakeholder • APAARI's constitution is reformed when necessary in accordance with the provision of Article 16 of the APAARI Constitution	APAARI as Association, APAARI Secretariat, and close partners	APAARI reforms to deliver on APAARI's mission and vision. Effective participation and engagement by partners. Strengthened thematic and commodity research and innovations. Strengthened networks among stakeholders.

Annex 2. Development themes and outcomes

Theme 1: Mobilization, management and use of natural resources for sustainability of agri-food systems

Development Outcome 1.1 Land and water resources are managed and used effectively for sustainable productivity and environmental protection.		
Indicators of success: - Improved land and water management technologies with increased options are available - Enriched and refined conservation agriculture options for location specific and wider application are available - Location-specific improved land and water conservation technologies are available - Training of primary stakeholders in conservation agriculture and resource conservation technologies delivered successfully		
Specific strategies		Indicative activities
1.1.1	Design and adapt improved land and water management technologies with intrinsic soil management and sustainability (soil fertility, salinity, organic matter, soil structure, water infiltration, etc.)	- Review and share best practices in land and water management - Organize an expert consultation on land and water management strategies - Facilitate networking and engagement on land and water management
1.1.2	Assess and support adoption of CA options and resource conservation technologies (RCT) and systems	- Organize expert consultation on CA and RCT - Generate and share technical information on CA and RCT - Organize training of AFRIS on CA and RCT - Facilitate networking and partnership on CA
Development Outcome 1.2 Forests, agro-forestry and trees are utilized and integrated for the transformation and development of agri-food systems		
Indicators of Success: - Location-specific novel agroforestry systems and practices are available for wider dissemination and adoption - Policy makers and development organizations are equipped with improved policy options on agro-forestry and land use - Research / innovations and development systems are supplemented with options of integrated systems of agroforestry, trees and forests		

Specific strategies		Indicative activities
1.2.1	Develop novel agro-forestry systems for the benefit of smallholder farming and rural communities	- Document and share case studies on novel systems - Facilitate partnership and networking at a local level - Organize expert consultations on agroforestry systems
1.2.2	Improve policies and institutional arrangements to enhance community assets and rights to forests, tree and land	- Organize policy dialogue on community assets, rights to land and forest and land use and sharing - Promote integrated research and development (R&D) systems
Development Outcome 1.3 Agrobiodiversity is effectively managed and utilized for increased agricultural productivity, efficiency and sustainability.		
Indicators of Success: - Improved methods, approaches and programmes on conservation of underutilized bio-resources are available and used - Refined options on use of underutilized bio-resources are available for dissemination and adoption - Enriched data and information are used for efficient exchange of genetic resources in sub-regions and in the region - Successful training of primary stakeholders in conservation and use of underutilized species is delivered		
Specific strategies		Indicative activities
1.3.1	Ensure special focus on the conservation and use of underutilized and neglected species for enhanced food and nutritional security, healthy living, environmental protection and sustainability	- Facilitate consultation on conservation, including in situ/on-farm conservation and cryo preservation - Organize e-training and sharing of expertise on conservation and use of underutilized species
1.3.2	Promote the use of efficient information and data systems supporting the exchange of genetic resources in the region	- Document and disseminate information on conservation approaches and methods - Organize training on data and information management systems - Organize training on understanding of treaties, standards, protocols, regulations, and exchanges
Development Outcome 1.4 Biotechnologies and related regulatory systems are promoted and applied for improved productivity, nutritional quality, and sustainability of agri-food systems.		
Indicators of success: - Policy makers and wider stakeholders of research and innovation systems have greater understanding of the use of advanced biotechnologies - Underutilized and neglected bio-resources are improved through increased use of advanced biotechnologies - Regional and sub-regional partnership and networking are actively operating through the Asia-Pacific Consortium on Agricultural Biotechnology (APCoAB) programme		

Specific strategies		Indicative activities
1.4.1	Create awareness of biotechnology as an integral component to achieving food and nutritional security and overcoming the impacts of climate change amongst policy makers and stakeholders	- Organize consultation on advanced technologies for smallholder producers - Engage in policy advocacy for sensitization of policy makers on the application and promotion of advanced agri-biotechnologies and innovations.
1.4.2	Improve underutilized species (crop, animal and other bio-resources) of potential value through biotechnologies based on needs and feasibility	Facilitate exchange of expertise on underutilized species (crops, animals, fish and bio-resources) in partnership with Crops For the Future and AVRDC – The World Vegetable Center, International Livestock Research Institute, and the World Fish Centre
1.4.3	Support regional, sub-regional and public-private partnerships on biotechnology	Rejuvenate the APCoAB programme on facilitating partnerships and networking in biotechnology
Development Outcome 1.5 Systems of sustainable generation and use of energy, including bio-energy and biomass are designed and adapted to local conditions.		
Indicators of success: - Small-scale biomass utilization options are available for generation and use of bio-energy by small producers - Capacity of research and innovation system on the development of small-scale technologies for recycling agricultural biomass improved - Policy options on generation and use of renewable resources are available for adoption by public and private sector organizations		
Specific strategies		Indicative activities
1.5.1	Develop and promote efficient small-scale options for recycling agricultural biomass suitable for enriching soil nutrients and generating bio-energy	- Compile and share information on technologies on small-scale recycling of biomass with AFRIS and agri-food systems - Conduct diagnostic studies on constraints and opportunities in biomass use - Organize an expert consultation for development and promotion of recycling - Facilitate training for AFRIS on development and promotion of small-scale biomass recycling technologies
1.5.2	Develop policies and strategies to generate and use renewable energy such as solar, wind and biomaterials from agri-food systems	- Review available technology and policy options on renewable energy - Generate and share information on renewable energy - Facilitate policy dialogue on renewable energy - Facilitate development of public-private-community partnerships for renewable energy

Theme 2: Management of risks and uncertainties in the agri-food system

Development Outcome 2.1 Policies and strategies for managing (minimizing) price and market risks in agriculture and agri-food systems are developed and adapted.

Indicators of success:

- National strategies and options on minimum support price for wide ranging commodities are available for sharing with appropriate stakeholders
- Regional and sub-regional partnerships among research and innovation systems on early warning and price projections are established

Specific strategies		Indicative activities
2.1.1	Develop and apply policy innovations, regulations and strategies for minimum support and guaranteed prices	• Document approaches, types and commodities under minimum/ guaranteed prices • Facilitate policy dialogue on price and market risk management strategies
2.1.2	Develop tools to provide early warning on risks and updates on price, covering national regional and global scenarios	• Facilitate regional partnerships and networking for sharing knowledge on prices and risks (including early warning systems)

Development Outcome 2.2 Tools for coping with uncertainties arising from the effects of climate change, sea level rise, natural disasters and man-made catastrophes are developed and improved.

Indicators of success:

- Improved climate-smart agriculture practices are available and shared for adoption
- Successful training of research and innovation system on coping with uncertainty delivered
- Agricultural commodity insurance schemes are available and shared for adoption

Specific strategies		Indicative activities
2.2.1	Develop and support adoption of climate smart technologies and management solutions to cope with production uncertainties and build resilience in crop, livestock, and fisheries sectors	• Document and share knowledge on climate smart technologies and management solutions • Organize training programme for research and innovation systems on coping with uncertainties
2.2.2	Develop and apply commodity and enterprise insurance schemes	• Facilitate partnership and networking on application of innovative public insurance for coping with uncertainties

Development Outcome 2.3 Systematic processes of and partnerships in biosecurity at borders and on farms in preventing and managing the spread of transboundary pests and disease are developed.

Indicators of success:

- Co-operative network on trans-boundary diseases established among research and innovation systems in sub-regions and region
- Exchange programme of technical expertise on trans-boundary diseases within region established

Specific strategies		Indicative activities
2.3.1	Establish a co-operative network/ consortium of Asia-Pacific nations and international organizations to build capacity for effective animal and plant disease surveillance and rapid response against transboundary pests and disease	• Facilitate a cooperative regional network involving national, regional and global partnership • Facilitate exchange of expertise and knowledge within region

Theme 3: Inclusive development and integration of value chains targeted at benefiting smallholders

Development Outcome 3.1 Small producers, rural communities and women are integrated with other value chain actors so they receive the benefits of integrated markets.

Indicators of success:

- Contract farming portfolios and options for small holder producers are available
- Good practices on food safety, quality standards and regulations are available

Specific strategies		Indicative activities
3.1.1	Support the involvement of smallholder producers in contract farming in multilateral and bilateral markets on competitive basis	• Assess and develop options for contract farming • Organize expert consultation on contract farming and benefit sharing
3.1.2	Establish and enforce food safety and quality policies, standards and regulations	• Compile and assess food safety and quality, standards and regulations • Facilitate policy dialogue on adaptation, quality and safety standards and regulations

Development Outcome 3.2 Innovative best practices for reduced harvest and postharvest loss and wastage is applied and integrated.

Indicators of success:

- Advanced on-farm harvest and post-harvest technologies for minimising loss and waste are available and shared with stakeholders
- Principles, guidelines and good practices on successful value-adding, post-harvest and value chain innovations are available and adopted for up- and out-scaling

Specific strategies		Indicative activities
3.2.1	Design and support adoption of on-farm harvest and postharvest strategies and technologies for reduction of loss and waste	• Develop and share of compendium of the technologies • Facilitate sub-regional workshops on reduction of loss and waste during harvest and post-harvest processes
3.2.2	Develop, assess and up-scale successful innovations on value addition, post-harvest and value chain approaches for reducing loss and waste	• Document successful value addition innovations • Organize expert consultations on successful innovation and best practice for post-harvest and value chains and additions

Development Outcome 3.3 Smallholder agriculture is integrated into manufacturing and services sectors, especially agro-industries, agri-businesses and agri-services to ensure employment for rural communities.

Indicators of success:

- Options for development of cost-efficient agro-industries, agri-businesses and agri-services are shared
- Agriculture and agro-tourism models are promoted for attracting youth to agriculture and rural areas

Specific strategies		Indicative activities
3.3.1	Generate cost effective inputs and services necessary for efficient primary production.	• Study and compile options of development of small-scale agro- industries, agri-services and agri-businesses • Facilitate policy dialogue on cost effective inputs and services • Facilitate networking and awareness raising on agro-industries, agri-business and agri-services
3.3.2	Promote agriculture and agro-tourism as options for retaining youth in agriculture and rural areas.	• Promote e-agriculture (ICT use in agriculture) and agro-tourism as attractive sectors to retain youth in rural areas • Share success stories on engagement of youth

Theme 4: Analysis, strengthening and formulation of public policy and overarching regulatory frameworks that support the transformation and development of agri-food system

Development Outcome 4.1 Research into policy, socioeconomics and markets is supported to assist with developing and implementing policies and strategies to increase agricultural growth and development.		
Indicators of success: • Evidence-based agricultural and rural development policies are available for adoption by public and private sectors • Capacity of policymakers in policy design and formulation enhanced • Socio-economic research is clearly embedded in research and innovation systems • Improved data to develop marketing systems is available and shared for adaptation through policy briefs		
Specific strategies		Indicative activities
4.1.1	Enhance agricultural policy research for effective design of agricultural policies and strategies	• Promote policy research for formulation of agri and rural development policies • Organize training in policy design and formulations
4.1.2	Promote and support socio-economic research that contribute to socioeconomic development	• Promote and integrate socio-economic research into AFRIS
4.1.3	Use results of marketing research on inputs, outputs and services to create integrated and effective marketing systems	• Organize training on use of marketing research in developing integrated and effective marketing • Organize training on preparing policy briefs based on research
Development Outcome 4.2 Policies and strategies for accessing and mobilization of land and water resources by smallholder producers and landless rural communities are developed and adopted.		
Indicators of success: • Policies and strategies on access to and use of land are available and shared for adaptation • Policies and strategies on access to and use of water are available and shared for adaptation		
Specific strategies		Indicative activities
4.2.1	Develop and apply policies and strategies on land and water use, access and management	• Facilitate policy dialogue on access to and use of land and water resources for development agri-food systems • Support policy design and influence enabling environment on enhancing access to land and water resources

Annex 3. Potential partnership between primary stakeholders and APAARI

Organization type	Areas of potential partnership between APAARI and primary stakeholders
NARIs/ NAROs	• Linkages between NARIs-NAROs, experts and policy makers • Collaborative and networking research projects • National engagement in regional and global events • Co-organized seminars, conferences and events • Capacity development of researchers • Learning and information-sharing platform (portal) on technologies • Knowledge sharing, networking and transfer (online and face-to-face) • Strategy development in communications and private sector partnership • Shared contact database of experts • Scientist/expert exchange programmes • Advisory support on partnership with other NAROs, NARIs and international agricultural research centres • Joint publications of resources on various technologies
Policy bodies	• Promotion of model of agri-food systems • Agri-food knowledge networks • Harmonization of policies • Knowledge and experience sharing • Joint policy research • Policy support and technology transfer • Links with donors on joint research • Capacity building in developing proposals for donor funding • Collaboration with international and national organizations
Global fora	• Direct links with regional funding organizations consistent with innovative investment facility • Specific country-based actions addressing new forms of investment and capacity development (with GFAR and national partners) • Promotion of global networks and initiatives
Regional organizations	• Competitive grants for collaborative research and innovations • Capacity development in planning and implementation of joint research • Regional networking and partnership

Organization type	Areas of potential partnership between APAARI and primary stakeholders
Sub-regional organizations	• Links among and between national and regional organizations • Links between Asia and the Pacific sub-regions.
Higher education	• Links with APAARI members and other potential partners • Opportunities for post graduate studies and research • Development of entrepreneurship among students/youth • Joint training with APAARI members • Human resource mobilization • Exchange of staff and students • Capacity building through global and regional fora and training • Information sharing about collaboration opportunities • Enhancement of existing laboratories (e.g. biotechnology, soil, bio-control) • Updating curriculum and syllabuses in line with development needs
CGIAR Centres	• Links with NARIs/NAROs, donors, policy bodies, and advanced institutions • Advanced and strategic research • Sharing of regional/ international public research goods and services • Support on identification and prioritization of strategic research • Sharing of innovations approaches and success stories
AIRCA	• Linkages on planning and implementation of R&D and innovations • Knowledge sharing on research and development • Resource mobilization • Opportunities for consultation • Research networks • Workshops, conferences, dialogues, etc.
International Development Organizations	• Regional /international workshops/events • Experts to share experiences • Knowledge sharing • Collective development actions • Engagement with global partners working in other development areas
Civil Society Organizations (NGOs)	• Links with donors and markets • Cross-learning and long-term partnership with secured resources • Definition of roles, responsibilities and accountability of different partners • Capacity development of weaker partners (e.g. food processing, value chains, land and water productivity) • Knowledge and information exchange • Sharing of good practices, financial and technical resources, market and value chain, development of farmers' organizations and cooperatives • Joint applied research and innovation projects • Participation in regional and national networking

Organization type	Areas of potential partnership between APAARI and primary stakeholders
Civil Society Organizations (Farmers' Organizations)	● Links with government, NGOs, research organizations and universities ● Exchange visits ● Identification of location specific farmers' innovations ● Scaling up of farmers' successes ● Capacity building of farmers (e.g. climate change adaptation) ● Dialogue among FOs and agricultural research institutions to determine needs, priorities and areas for collaboration ● Joint planning of activities and implementation of grass-root foresight work ● Participation in FOs' visibility and awareness programmes ● Financial and technical support ● Development of agri-business models ● Platform to promote evidence and science-based research
Women's Organizations	● Participation of women in productive, research and capacity development activities ● Links with donors and global fora ● Collaborative R&D projects ● Dialogue on gender issues ● Capacity building in ICT, research and organizational management ● Networking with civil society and other stakeholders ● Knowledge and resources to develop efficient integration of women with various types and levels of value chains/markets and value additions ● Long-term strategic planning and governance for collaboration
Youth Organizations	● Links with international organizations and donors ● Participation in policy dialogue and farmers' field schools ● Capacity building of young scientists (e.g. training of trainers) ● Youth-centric programmes for agri-food research development ● Development of guidelines for farmers (e.g. facilitation of baseline survey and knowledge resources throughout the network)
Private sector	● Public-private participatory partnerships ● Investments from old industrial models to new agro-ecological models ● Engagement in policy dialogues and expert consultations

Annex 4. Results framework as basis for the monitoring and evaluation framework – APAARI Strategic Plan

Objective level	Indicators of success	Means of verification	Assumptions
APAARI Vision: Strengthened research and innovations for sustainable agricultural development in the APR			
Themes - Development outcomes: Strengthened AFRIS in APR	Immediate outcomes - Strengthened knowledge management - Stronger partnerships and networks - Increased human, organizational and institutional capacity - Enhanced investment in AFRIS - Greater productive and rewarding participation of women and youth Development outcomes - Sustainable natural resource management - Improved risk management - Enhanced integrated value chains - Effective public policy and enabling environment	Baseline survey for 2016, reports, proceedings and evaluation of events, specific targeted surveys, periodical reviews, reports from AFRIS	- APAARI, AFRIS, their partners and other primary stakeholders actively engage and participate in collective actions - Agencies in relevant sectors, such as rural development, science and technology, agri-industries, manufacturing, forestry, fisheries, trade and business, engage and participate in partnership actions
APAARI Programmes – Immediate outcomes: Effective promotion, coordination and strengthening of agri-food research and innovation systems delivered by APAARI, AFRIS and partners			
1. Knowledge Management			
Outcome 1.1. AFS made more knowledge intensive to effectively contribute to sustainable agricultural development	- Increased access by primary stakeholders to knowledge on AFS - Improved use of tools and processes, including ICTs, within agri-food systems	Stakeholder survey, website statistics, annual progress reports	AFRIS and partners are open to learning, knowledge sharing and change, and use of ICTs

Objective level	Indicators of success	Means of verification	Assumptions
Outcome 1.2 AFRIS strengthened through more effective knowledge management	- Increased access by AFRIS to knowledge on natural resources, risks and uncertainties, integration of value chains, and youth involvement in e-agriculture and agro-tourism - Increased application of innovative knowledge-sharing and learning processes amongst AFRISs - Improved capacity in knowledge management to enhance the management of natural resources, risk, agricultural policy and integration of value chains	Website statistics, annual progress reports, training evaluations and reports	AFRIS is open to innovative knowledge sharing, learning and engagement, and the knowledge shared is relevant to diverse stakeholders
2. Partnership and Networking			
Outcome 2. 1 Innovative and strategic partnerships and networking strengthened	- Increased technical cooperation among AFRIS in improving land and water management technologies, agroforestry systems, underutilized species and biotechnology - Increased networking at sub-regional, regional and global levels to enhance the management of price risks and transboundary pests and disease - Improved partnership with sub-regional and regional organizations for development outcomes - Increased networking with regional and global multi-sector development partners	Meeting evaluations and reports, number of collaborative events, number of signed letters of agreement/ understanding	AFRIS are motivated and committed to collective actions through partnership and networking
3. Capacity Development			
Outcome 3. 1 Institutional arrangements for effective delivery of outcomes from agri-food research and innovation systems strengthened	- Improved policy design by agri-food research and innovation systems - Improved standards and regulations in priority areas of agri-food research and innovations - Enhanced institutional management	Stakeholder surveys	Policy and institutional governance are congenial and supportive in practicing such enhanced policies and standards

Objective level	Indicators of success	Means of verification	Assumptions
Outcome 3.2 Organizational capacity for effective management and delivery of research and innovations enhanced	- Improved capacity of research managers and planners in planning, monitoring, evaluation and impact pathways - Improved leadership, governance, transparency, accountability, enabling infrastructure, knowledge management, partnership, networking, advocacy and human resources - Increased number of researchers from small-island, mountainous countries and emerging organization benefiting from capacity development events	Training evaluations. knowledge, attitude, practice surveys	Right participants are objectively targeted for capacity development
Outcome 3.3 Technical competency developed	- Improved understanding of practices in conservation agriculture, conservation and use of neglected species, options for recycling agricultural biomass, coping with uncertainties, and cost-effective inputs and services for primary production - Improved regional cooperation in agrobiodiversity, integration of value chains, cost-effective production of inputs and services, and transboundary pests and disease - Improved policies in land and water resources, market integration and biotechnology	Training evaluations. knowledge, attitude, practice surveys. Annual stakeholder surveys	Long-term consistent support is available to develop technical competency
4. Advocacy			
Outcome 4.1 Understanding of the role of agri-food research and innovations in agri-food systems and socio-economic development improved	- Increased political awareness of the importance of agrobiodiversity, renewable energy, community rights to natural resources, biotechnology, food safety and making agriculture attractive to youth - Increased engagement of disadvantaged stakeholders in the agri-food system in regional and international forums - Social and broadcast media are effectively used to support advocacy efforts	Stakeholder surveys. meeting reports, media statistics	Political will and support exist in recognition of the role of agri-food research and innovation

Objective level	Indicators of success	Means of verification	Assumptions
Outcome 4.2 Investment in agri-food research and innovations improved for development of AFS	• ASTI project implemented effectively • Improved evidence-based decision making on investment in agri-food system • Established and effectively used advocacy toolkit and resource group on promoting increased investment • Skills and capacities in mobilization of funding enhanced	ASTI progress reports, stakeholder surveys, number of downloads from the advocacy toolkit, knowledge, attitude, practice surveys	• Right trusted partners are available and involved in collective action on enhanced and improved investment
5. Women and Youth - Crossing Cutting Area : Women and youth are engaged in productive and rewarding actions			
Outcome 5.1: Women and youth are engaged in productive and rewarding activities in AFS	• Improved participation of women and youth in productive and rewarding activities • Increased number of women and youth with skills and expertise in value addition, agri-food research and extension, entrepreneurship, ICT and KM	Stakeholder surveys	• Stakeholders of AFS are open to the engagement of women and youth in productive and rewarding activities
Outcome 5.2: Women and youth are appropriately represented in policy and decision making in agri-food systems	• Increased representation of women and youth organizations at national and regional events. • Increased representation of women and youth in APAARI's events and meetings	Meeting reports and evaluations, annual stakeholder surveys	• AFRIS supports the representation and engagement of women and youth in their events and meeting
6. Foresight and visioning : This cross-cutting area is exogenously determined and is not based on any results emerging from implementation of the Strategic Plan. Rather, outcomes of this area become the basis for further advanced planning and therefore there is no need to have any further basis for monitoring and evaluation under this area.			

Objective level	Indicators of success	Means of verification	Assumptions
7. APAARI Governance and Development: APAARI is efficient and effective in contributing to strengthening of AFRIS			
Outcome 7.1 APAARI is efficient and effective in sustained strengthening of AFRIS the APR	• APAARI is effectively delivering in its role in implementing its strategic and biennial implementation plans • A high level of governance through transparency and accountability • APAARI consists of a responsive portfolio of work for strengthening AFRIS • Women, youth and CSOs are involved in APPARI as members, partners and stakeholder • APAARI's Constitution is reformed when necessary and in accordance with the provision of Article 16 of the APAARI Constitution	Base line survey for 2016, annual progress reports. strategy and policy document management standards, reformed constitution	• APAARI constitution is appropriately reformed • Inclusive and wider stakeholders align with APAARI mandate

Annex 5. Members of the task team for developing the Strategic Plan

Dr Raghunath Ghodake	Executive Secretary	Leader and Coordinator
Dr Simon Hearn	Consultant	Advisor
Dr Birte Komolong	Consultant	Member
Ms Martina Spisiakova	KM Coordinator	Member
Dr Syed Abbas	Consultant	Member
Dr Bhag Mal	Consultant	Member
Dr Emma Zalcman	Planner	Member

Consultation /approval events



Participants at the Advanced Consultation on Strategic Plan

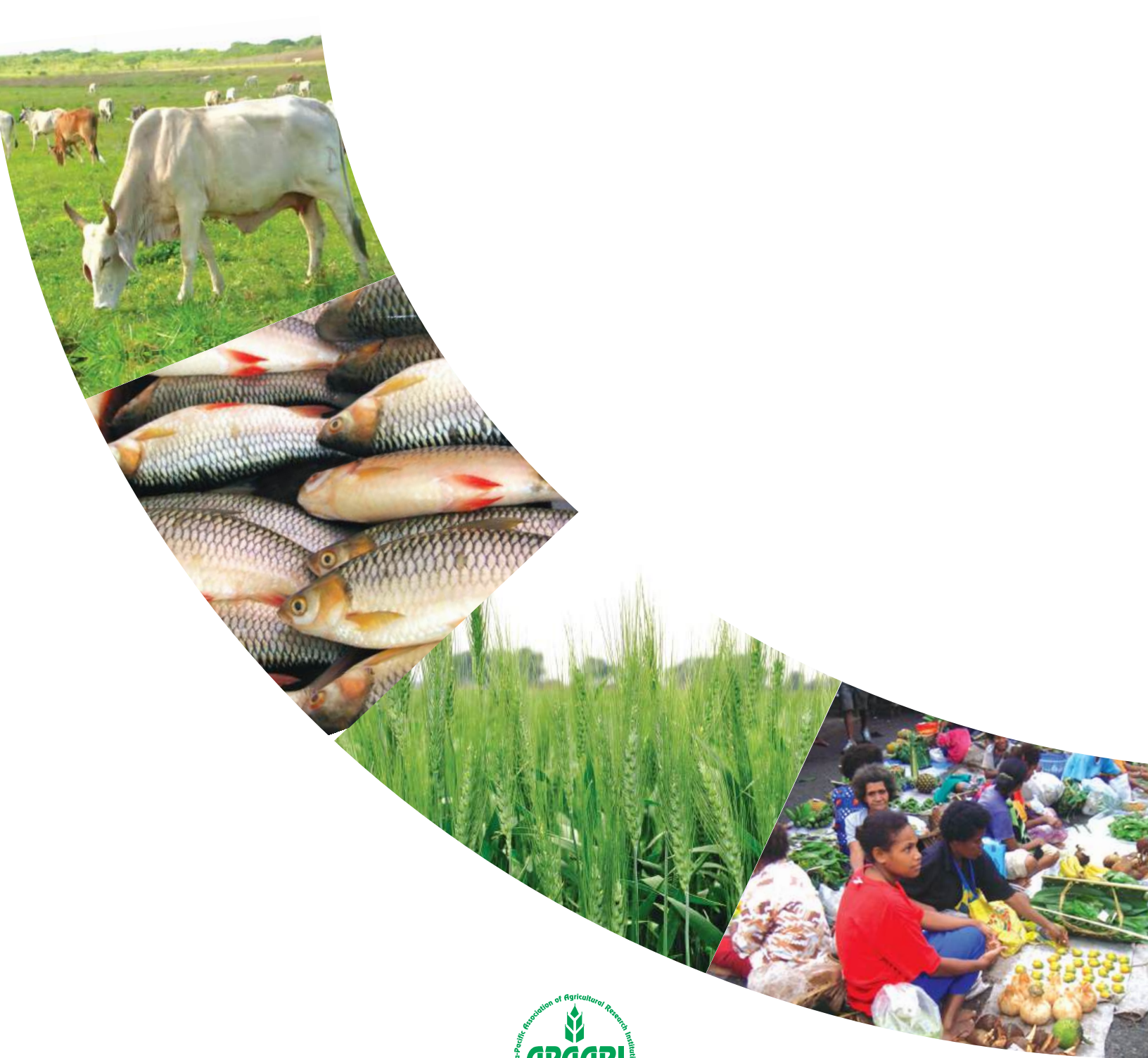
Consultation /approval events



Participants at the APAARI Executive Committee Meeting, 8 September 2016, Bangkok



Participants at the 14th APAARI General Assembly Meeting, 3 November 2016, Taichung



Asia-Pacific Association of Agricultural Research Institutions (APAARI)

C/o Food and Agriculture Organization of the United Nations - Regional Office for
Asia and the Pacific (FAO RAP)

4th Floor, FAO Annex Building, 202/1 Larn Luang Road,
Pomprab Sattrupai District, Bangkok 10110, Thailand

Phone: +662-2822918; Fax: +662-2822920

Email: apaari@apaari.org; Website: <http://www.apaari.org>

ISBN 9786167101057



9 786167 101057



<http://apaari.blogspot.com/>



<http://www.facebook.com/APAARICommunity>



<http://www.twitter/APAARI>



www.flickr.com/photos/apaari