Strategy Paper

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Progress Through Science

Motivating and Attracting Youth in Agriculture




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Progress Through Science

Trust for Advancement of Agricultural Sciences (TAAS)

GOAL

An accelerated movement for harnessing agricultural science for the welfare of people.

MISSION

To promote growth and advancement of agriculture through scientific interactions and partnerships with stakeholders.

OBJECTIVES

- To act as think tank on key policy issues relating to agricultural research for development (AR4D).
- Organizing seminars and special lectures on emerging issues and new developments in agriculture.
- To institute national awards for the outstanding contributions to Indian agriculture by the scientists of Indian and other origin abroad.
- Facilitating partnerships with non-resident agricultural scientists visiting India for short period.

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Introduction

The global population is expected to be 9 billion by 2050, and youth would represent around 20 per cent (FAO, 2014). Most young people (around 85%) live in the developing countries (UNDESA, 2011). India has a comparative advantage over other countries in terms of its young population. As per India's census, the total youth population increased from 168 million in 1971 to 422 million in 2011. In 2017, 356 million, against China's 269 million. India's population is expected to remain young longer than that of China and Indonesia, the two major countries, that along with India determine the demographic features of the Asian continent (CSA, 2017). India also enjoys a demographic dividend with more than 60 per cent of its population of working age. According to a World Bank report, the working-age population will outnumber the dependent population for at least more than two decades (until 2040) in India. As per the estimates of National Higher Education Commission (NHEC), the average age of the Indian population in 2020 will be 29, as against 40 in the USA, 46 in Europe and 47 in Japan (British Council, 2014). Agriculture still remains the key sector, providing livelihood and employment opportunities to more than 60 per cent of India's population living in rural areas. Overall, in the developing world, youth and agriculture are the twin pillars of progress and prosperity, especially for achieving sustainable development goals (Paroda *et al.*, 2014).

It is a known fact that the progress and prosperity of a nation depend, to a large extent, on its well-trained, enlightened and disciplined youth (both men and women). Indeed, young people are a major resource and agents of change for overall growth and development, as they possess tremendous enthusiasm, creativity, energy, imagination and dedication. The energy and passion of youth, if harnessed properly, can bring significant positive change in all sectors, including agriculture, and the society as a whole (Saharawat *et al*., 2013). Young people are creative digital innovators and active citizens eager to contribute positively towards sustainable development goals (SDGs). While the world's youth cohort is expected to grow, employment and entrepreneurial opportunities for youth, particularly those living in the developing countries remain limited, less remunerated and of poor quality (Percy-Smith and Akkermans, 2011-12). Therefore, it is vital that young people are motivated to come into the mainstream of agriculture for accelerating faster growth and development.

Major Challenges

In the recent past, retaining youth in agriculture has been one of the major challenges in the developing world. The principal challenges in retaining youth in agriculture include: insufficient access to knowledge, information and education; limited access to land; inadequate access to financial services; lack of formal and informal on-the-job training; limited access to markets; and limited involvement in decision-making and policy dialogues (Saharawat *et al*., 2013). Over the years, the farming community has become gradually poorer due to small land holdings, which comprise over 80 per cent of total farm households. Multiple risks associated with agriculture intensify the challenges owing to over-exploitation of natural resources linked with rapidly increasing globalization, soaring fuel and food prices, volatile markets and growing climatic volatility. Youth is a great resource, to be used for agricultural development. In the past few decades, because of rapid

industrialization and urbanization, youth and agriculture are experiencing unprecedented transformation. Another major dilemma in the developing world is the poor social image of agriculture due to which, rural youth are moving towards the urban sector, looking for alternative and better opportunities (Paroda *et al*., 2013). It is evident through successful business models of leading public and private sector organizations, as well as multinational companies (e.g. IT sector), that youth are more innovative and productive as well as receptive to new technologies. On the contrary, in the agriculture sector there is a wide gap between energy (youth) and experience (older people), which is a cause of backward nature of farming and slow adoption of innovations and new technology. There are huge losses in the technology dissemination process, delinking science with society and making farming non-remunerative, non-resilient and unattractive to youth (Saharawat *et al*., 2013).

Under the above scenario, agriculture is not seen as a remunerative and respectable profession, particularly by youth, and is not considered a sustainable pathway to meet food, nutrition and livelihood security. The challenges are complex and interwoven. Therefore, youth (men and women) has to be motivated through advances in innovation, capacity development, partnership and a participatory approach, through enhanced skills and a positive attitude towards their role in the overall agricultural and rural development of the country.

Role of Youth in Agriculture

The challenge to retain youth in agriculture has been recognized globally. It first figured prominently in 2006 during the global conference organized by the Global Forum on Agricultural Research (GFAR) in New Delhi. The deliberations resulted in an agreement to form a youth-led international forum, which led eventually to the formation of Young Professionals for Agricultural Development (YPARD) and the first Global Conference on Agricultural Research for Development (GCARD 1), held at Montpellier, France, in 2010. The

importance of youth in agriculture was further emphasized and structurally debated during GCARD 2, organized at Punta del Este, Uruguay, in 2012. GCARD 2 had put forth 'Youth and Agriculture' as one of the topics for focal discussions. The Organizing Committee of GCARD 2 emphasized that, globally, agriculture is considered an ageing and undervalued profession and youth needs special encouragement in all aspects of AR4D. As a follow-up to the GCARD 2 discussions, the Indian Council of Agricultural Research (ICAR), in association with Asia-Pacific Association of Agricultural Research Institutions (APAARI) and Trust for Advancement of Agricultural Sciences (TAAS), organized a national workshop on 'Foresight and Future Pathways of Agricultural Research through Involvement of Youth in India', in March 2013, at the National Agricultural Science Centre (NASC) complex, New Delhi. About 300 participants from different ICAR institutes and state agricultural universities, including young farmers, students, private sector representatives and senior mentors, attended the workshop. The workshop debated the role of youth, being an important critical mass in ICAR, in meeting agricultural R&D needs. Currently, the country has around 7,000 agricultural scientists in India's public sector, of which more than 35 per cent are below the age of 40. The two days of deliberations covered a wide range of disciplines and issues related to Indian agriculture, natural resource management, crop improvement and protection, horticulture, post-harvest technology, livestock and fisheries development, agricultural engineering and implements, information communication technology (ICT) and socioeconomics. The deliberations identified research needs across disciplines and regions where youth can play a prominent role. The key recommendations of the deliberations included: the urgent need to reorient agricultural research towards a farming systems mode by ensuring inter-institutional and inter-disciplinary collaboration; creating state-of-the-art research facilities; undertaking joint research with the private sector and international/advanced research centres through the creation of excellent research infrastructure; provision of a seed grant (Rs.

10-15 lakhs); encouraging scientists to initiate research; short- to long-term training for young scientists at advanced research institutions; emphasizing greater involvement of women in decision-making bodies; and greater emphasis on human resource development through special allocation of funds for skill development (Saharawat *et al.*, 2013).

Retaining Youth in Agriculture

A program on Attracting and Retaining Youth in Agriculture (ARYA) was initiated by the ICAR after the workshop, and is being implemented successfully by the Krishi Vigyan Kendras (KVKs) in different states of India. Overall, the deliberations led to the development of a Road Map to define and delineate pathways for developing and nurturing a new generation of young agricultural professionals and entrepreneurs, with greater emphasis on technical capacity development, institutional arrangements, innovative networking, appropriate investments and harnessing the full potential of youth, in order to realize a qualitative change in their lives. Also, the government formulated a National Policy for Skill Development and Entrepreneurship in 2015 to provide an umbrella framework for all skill development activities carried out within the country, to align them to common standards and to link with demand centres. More than 50 per cent of the Indian population is involved in the agricultural sector but hardly five per cent of rural youth are involved in agriculture as a profession. Rural youth (both men and women) are an important resource to achieve accelerated agricultural and rural development. Accordingly, effective channelling of this resource to constructive activities can contribute to increased prosperity for all. On the contrary, the current developmental models spur migration of educated and skilled youth away from agriculture, resulting in scarcity of skilled and progressive farmers/ entrepreneurs in the rural and agricultural sector. As stated earlier, the rural youth has been deprived of minimum facilities, needed opportunities and encouragement in innovative farming over time. Thus, most of the youth who remain in agriculture

have limited knowledge and skills and are being forced to follow the same old traditional practices. In the Asia-Pacific region, the challenges and opportunities for youth in the agricultural profession do not differ much. Different countries are tackling the issue of involving agri-professionals in the farming sector. There are several youth-led successful models for transforming agriculture in different countries. However, these models lack an appropriate mechanism for regional and cross-border learning from different countries' experiences. Keeping these challenges and opportunities in view, a regional workshop on 'Youth and Agriculture: Challenges and Opportunities' was organized jointly by APAARI and the Pakistan Agricultural Research Council (PARC) in Islamabad on 23-24 October 2013, in collaboration with Global Forum on Agricultural Research (GFAR), International Maize and Wheat Improvement Center (CIMMYT), International Center for Agricultural Research in the Dry Areas (ICARDA), International Center for Research in the Semi-Arid Tropics (ICRISAT), International Food Policy Research Institute (IFPRI) and Bioversity International. The deliberations highlighted the emerging phenomena of over-urbanization and growing youth unemployment, which are leading to social disparity, on the one hand, and global food insecurity on the other. Prioritizing investment for attracting youth is, therefore, crucial for future agricultural development. Greater involvement of youth in farm advisory, empowering them with knowledge to serve the society through the creation of technology-led business models and providing value-added services and creating employment opportunities, is the way forward for enhancing agricultural productivity for a food-secure society. This needs a paradigm shift in our approach and policy focused on youth to transform them from 'job seekers to job creators'. Capacity development of youth through informal and vocational training and creating awareness of new opportunities in agriculture, including secondary and speciality agriculture, would attract youth in agriculture, help bridge the gap between rural and urban and boost rural economies in the region. The

local institutional, national and regional leaderships in the Asia-Pacific region, therefore, need to take initiatives for greater involvement of youth in policy planning and prioritization of investment for shaping their future in farming and preparing them professionally for tomorrow's agriculture and the task of feeding, sustainably, a projected global population of 9.2 billion by 2050. The key points that emerged from the regional consultation were: (i) reorientation of agriculture to agricultural research for results (AR4R) by promoting agri-innovation; (ii) agri-business and entrepreneurship through involvement of youth at national, regional and international levels; (iii) urgently linking agriculture with health, environment, nutrition and other basic science disciplines to address challenges by young professionals; (iv) focusing attention on capacity development of youth through vocational training; (v) inclusion of agricultural education in the school curriculum and farmers' participatory approach to technology generation; and (vi) transfer and adoption to ensure faster growth in agriculture. Innovative approaches to developing and transferring technologies, efficient funding mechanisms, openness in knowledge-sharing, much-required marketing reforms and partnership at national and regional level are important areas to pursue; and to make agriculture intellectually rewarding for youth, special emphasis is needed on secondary agriculture, diversification, protected cultivation, crop intensification and use of ICT (TAAS, 2017).

In Asia, agriculture is one of the largest employment generating sectors. Therefore, there is a need to create awareness among youth regarding emerging opportunities. In South Asian countries, existing administrative structures, lack of prioritization of R&D, fragmentation along disciplinary lines, poor coordination and volatile public funding are some of the real impediments that need to be overcome soon through proper policy advocacy and public-awareness mechanisms. Also, there is an urgent need for strong political will and an enabling policy environment for greater involvement of youth in AR4D initiatives. For this, there is need to focus more on foresight, research partnership

and capacity development. A regional network is urgently needed in the overall interest of future agricultural growth for sharing knowledge, innovations and expertise in similar target environments and socioeconomic settings.

In view of the current agricultural challenges, increasing youth population and rapid globalization, developing world agriculture would require a paradigm shift in the mindset, from traditional agriculture as the means of livelihood to a business-oriented, specialized agriculture involving skilled youth in rural areas. It is obvious that empowering youth in agriculture would be an important vehicle for change. The current agricultural occupation scenario has to be made remunerative through scaling new innovations and entrepreneurships. It is clear that quality/skilled youth can only be attracted and retained in farming if it becomes economically rewarding and intellectually satisfying, associated with improved rural infrastructure and better educational and primary healthcare facilities. The comprehensive strategies for plausible transformation in future would demand more rewarding jobs in all agro-based and agro-related activities with equal opportunities and facilities in rural and urban areas, better options for public–private sector investments in agriculture and rural-sector infrastructure, and promotion of small agri-firms and producer companies to promote agri-food and value-chain systems (GLF, 2014). To empower rural youth, including women, there is an urgent need to also transform the extension system into an innovation extension platform that delivers technology-orientated knowledge, inputs and value-added services. The extension approach would have to focus around farming communities rather than an individual farm household approach, as had been the case in the past.

Recently, a Regional Conference on Motivating and Attracting Youth in Agriculture (MAYA) was organized by the Trust for Advancement of Agricultural Sciences (TAAS) jointly with Indian Council of Agricultural Research (ICAR), MS Swaminathan

Research Foundation (MSSRF), Asia-Pacific Association of Agricultural Research Institutions (APAARI), Young Professionals for Agricultural Development (YPARD), Skill India, Agriculture Skill Council of India (ASCI) and National Bank of Agriculture and Rural Development (NABARD) at NASC Complex, Pusa Campus, New Delhi on 30-31 August, 2018. Total of 227 youth (men and women) and experts representing different stakeholders had actively participated in the deliberations. The main objectives of the conference were to: (i) assess the role of youth in accelerating overall agricultural growth, (ii) provide exposure to various successful entrepreneurship models, (iii) understand the role of youth in rural advisory services and for knowledge linking farmers to markets, (iv) suggest needed policy reorientation to motivate and attract youth in agriculture, and (v) explore the possibility to build a regional platform for collaboration and partnership. The deliberations led to the adoption of 'MAYA Road Map' for urgent consideration and speedy implementation by all stakeholders.

The Road Map

For attaining faster the sustainable developmental goals (SDGs), all nations in South Asia need to develop and promote a sound strategy around "Role of youth for accelerated growth in agriculture" for which the following 'Road Map' offering the youth a number of opportunities for economic, social and agricultural development, was proposed at the conference:

- There is an urgency to have a '**National Mission on Youth in Agriculture'** with an aim to impart better knowledge and skill to youth on: i) sustainable, secondary and speciality agriculture, ii) efficient knowledge dissemination, including information communication technology (ICT), iii) technical backstopping for innovative farming, iv) new agri-business models, and v) entrepreneurship as well as linking farmers to markets through value chain. Under the Mission, concerted efforts are needed to build new skills of youth for innovative agriculture through both formal and informal

education. The best option for this is to impart agricultural education right from school level. In addition, the central and state agricultural universities and ICAR institutes must initiate entrepreneurship training through vocational and formal diploma programs. Also, the university curriculum needs to be revisited to address the emerging needs and aspirations of present-day youth and markets.

- Priority attention needs to be given to develop a new research agenda for ' **Youth-Agriculture Nexus**' which (i) delineates different contexts for youth-oriented agricultural research, (ii) identifies opportunities for young people's engagement in agricultural research and innovation for development (ARI4D), and (iii) determines youth's future pathway for attaining sustainable agricultural growth and income.

- Involvement of youth in '**Plough-to-Plate**' initiative can help in doubling farmers' income. Hence, their greater involvement as entrepreneurs will be the key to future growth and development. For this, networking for knowledge sharing/dissemination, participation of youth in outscaling of innovations through their validation using technology parks/innovation platforms, use of ICT, creation of agri-clinics, much needed support for mentoring/hand-holding, and awareness regarding intellectual property rights (IPRs) need to be the essential components of the proposed mission on youth.

- There is need for a paradigm shift from narrow focus on '**youth as a farmer**' to '**youth for value chain development**'. To provide better economic opportunities for rural youth in the changing agricultural scenario, there is an obvious need to move beyond the plot/field level agriculture i.e. from production to post-production level and to link with market for better income opportunities. The combination of agricultural value chains, technology and entrepreneurship will unlock vast economic opportunities

for youth in both the farm and non-farm sectors and hence youth need to be encouraged to set-up agri-service centres to offer custom-hire services for small and marginal farmers for mechanizing their farm operations to enhance production at reduced cost.

- The role of well trained and competent youth, with expertise in ICT application for e-NAM, start-up, stand-up and skill development schemes, agri-business enterprises, etc. is extremely important. Youth would thus need enabling policies for long-term investments, availability of easy and soft credit, provision of subsidy upfront to the entrepreneurs, farmer-farmer exchange visits, easy market accessibility, land law reforms for entrepreneurs, no taxation system for rural-based primary value addition involving youth, review of Agri-Clinic support system by the National Bank for Agriculture and Rural Development (NABARD), reforms in marketing laws such as scrapping of Agricultural Produce Marketing Committee (APMC) Act, provision of ready insurance for covering risk of 'start-up' entrepreneurs, etc. would immensely encourage youth to embrace agriculture.

- The private sector has also to play a proactive role in creating much needed '**Agri-Youth Innovation Corpus Fund**' as part of their corporate social responsibility (CSR) and enhance rural employment through special projects. Such an effort would enhance rural employment opportunities through small agri-business start-ups, public-private as well as private-private entrepreneurship. They may also help through soft loans and mentoring programs for involving rural youths as input dealers/suppliers as well as paid extension agents.

- There is an urgent need to '**institutionalize incentives**' and '**award/reward system**' in order to reward highly successful agricultural entrepreneurs and innovators. This will inspire as well as attract the youth to adopt agriculture as a profession for their happy living. Such an approach

should be a strategic priority at the local, state, country, and the regional level to ensure youth-led inclusive growth in agriculture.

- Success stories/case studies of young agricultural entrepreneurs and innovators need to be brought out and widely disseminated. Such selective studies must be well documented and nicely published. The successful entrepreneurs be also recognized and encouraged to act as role models and help in capacity development/technical back-stopping for other youth to be equally successful. In this regard, a compendium of youth-led success stories in various sectors of agriculture from different eco-regions of the country be brought out on priority and made accessible to others.

- It is high time that the Ministry of Agriculture and Farmers Welfare creates a separate '**Department of Youth in Agriculture**'. This will ensure collaboration and coordination with concerned departments in other Ministries such as Science and Technology, Skill Development and Entrepreneurship, Food Processing Industry, Rural Development, Commerce and Industry, Chemicals and Fertilizers, etc. so as to meet the aspirations of youth in agriculture. Such an institutional mechanism, with funding support through the proposed **'Mission on Youth in Agriculture'** will help in motivating and attracting youth in agriculture and allied fields.

- A '**Regional Platform on Youth in Agriculture**' needs to be established through facilitation role of global/ regional/national fora like Asia-Pacific Association of Agricultural Research Institutions (APAARI), Trust for Advancement of Agricultural Sciences (TAAS), Young Professionals for Agricultural Development (YPARD), etc. for knowledge sharing, capacity development, partnership and policy advocacy. They all could play an important proactive role in providing neutral platforms to youth for

their capacity development and confidence building for entrepreneurship.

- It is well understood that youth (men and women) of today has a different mind-set and outlook. Unfortunately, there exists an 'aspiration-attainment gap'. Hence, their aspirations must be addressed on priority. They like to pursue intellectually satisfying, commercially viable and socially empowering activities. All these are critical for future growth and development of any nation and would, therefore, need an enabling environment through policy and institutional support by all concerned.

Epilogue

The progress and prosperity of a nation depend primarily on its well-trained, enlightened and disciplined youth (both men and women) since they are the agents of change. As already emphasized, the youth invariably possess tremendous energy, enthusiasm, creativity and dedication. If these qualities are harnessed properly, a significant change can be brought in Indian agriculture. Unfortunately, the employment and entrepreneurial opportunities for youth, particularly those in rural areas, are limited, less remunerative and invariably of poor quality. Therefore, it is critical that young people are motivated to embrace agriculture as their profession and make it highly creative through adoption of secondary and specialty agriculture. For achieving this goal, they need to be motivated by exposure to new innovations, opportunities for skill development, new partnerships and through enabling policy environment.

The present situation demands skill development of rural youth through both formal and informal (vocational) trainings so as to build a cadre of entrepreneurs as well as technology agents. In future, efficient agro-advisory in the wake of increasing demand for quality and new agricultural knowledge, together with input support, can be best delivered through pluralistic

agricultural extension, i.e. a mix of public and private sector involving participation of youth, in particular. The emergence of private sector institutions such as corporate organizations, community based organizations, young farmers' associations, farmers' cooperatives, self-help groups, watershed and water-user associations, producer companies, non-governmental organizations, farmer producers, input providers, service providers, para-professionals, input producers, organic and inorganic mix fertilizer companies and rural-based low-cost primary processing enterprises offer significant opportunities for youth to get engaged in agriculture as an attractive profession. Overall, new endeavors by youth (men and women) would enable agriculture to become truly an economical and respectable profession.

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- Brainstorming Workshop on Soybean for Household Food and Nutritional Security - Proceedings and Recommendations, March 21-22, 2014.
- The Eight Foundation Day Lecture on "Sustainable Agricultural Development - IFAD's Experiences" by Dr. Kanayo F. Nwanze, President, IFAD, August 5, 2014.
- Need for Linking Research with Extension for Accelerated Agricultural Growth in Asia - Strategy Paper by Dr. R.S. Paroda, September 25, 2014.
- Brainstorming Workshop on Upscaling Quality Protein Maize for Nutritional Security - Recommendations, May 21-22, 2015.
- The Ninth Foundation Day Lecture on "21st Century Challenges and Research Opportunity for Sustainable Maize and Wheat Production" by Dr. Thomas A. Lumpkin, Former DG, CIMMYT, September 28, 2015.
- National Dialogue on Efficient Management for Improving Soil Health - New Delhi Soil Health Declaration - 2015, September 28-29, 2015.
- Regional Consultation on Agroforestry: The Way Forward - New Delhi Action Plan on Agroforestry 2015, October 8-10, 2015.
- National Dialogue on Innovative Extension Systems for Farmers' Empowerment and Welfare - Road Map for an Innovative Agricultural Extension System, December 17-19, 2015.
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About Author

Dr R.S. Paroda has made valuable contributions in the field of agriculture both as a researcher and an able administrator. He has made significant research contributions in the field of plant breeding and genetic resource management. During the period 1994-2001, Dr. Paroda spearheaded and modernized the national agricultural research system (NARS) as Director General, ICAR and Secretary, DARE, Government of India. During his leadership of ICAR, more than 20 new institutions were created in crops, horticulture, livestock, natural resource management, fishery, agricultural engineering and social science sectors. Dr. Paroda is well known for initiating and strengthening many visionary programs at the national level. The prestigious National Agriculture Technology Project (NATP) of the World Bank was designed by him to reorient agricultural research, education and extension system to meet new challenges faced by the agricultural research system. Dr. Paroda is the main architect of one of the world's largest and most modern National Gene Banks housing more than 200,000 crops germplasm accessions. The impressive National Agricultural Science Centre (NASC) Complex, located at Pusa Campus, was built mainly at his initiative and direction. International Crop Research Institute for Semi Arid Tropics (ICRISAT), Patancheru and Agriculture Research Institute of Kazakhstan have named their Gene Banks after Dr Paroda in recognition of his notable contributions in the field of genetic resource management. Dr Paroda has received several national/international awards and recognitions, including the most prestigious PADMA BHUSHAN in 1998. Other awards conferred on him are: Rafi Ahmed Kidwai Memorial Prize (1982-83), ICAR Team Research Award (1983-84), FICCI Award (1988), Om Prakash Bhasin Award (1992), Asia-Pacific Seed Association Special Award (1995), CGIAR Award for Outstanding Partnership (2000), Life Time Award by Association of Agricultural Scientists in America (2001), Dr Harbhajan Singh Memorial Award (2001), Dr B.P. Pal Memorial Award (2003), Borlaug Award (2006), ISCA Gold Medal for Excellence in Science (2006), Gold Medals from Ministry of Agriculture of Armenia (2006) and Vietnam (2012), Life Time Achievement Award of 'Agriculture Today' (2008), Dr A.B. Joshi Memorial Award (2012), Prof. Kanniyan Memorial Award (2012), and Krishi Shiromani Samman by Mahindra and Mahindra Ltd. (2013). He has been conferred Fellowship of several National Science Academies like, INSA, NAAS, NASI and was elected as General President of the prestigious Indian Science Congress in 2000-2001. Among international recognitions, he was elected as Fellow of Agricultural Academies of Russia, Georgia, Armenia, Tajikistan and the Third World Academy of Sciences (TWAS). He had also been the President of more than a dozen Agricultural Scientific Societies. Both American Society of Agronomy and the Crop Science Society of America had awarded their prestigious Honorary Membership on Dr Paroda in 2001. Dr Paroda has been conferred honorary D.Sc. by 15 academic institutions including Ohio State University, Indian Agricultural Research Institute, Scientific Council of Agricultural Academy, Republic of Azerbaijan and State Agricultural Universities at Pantnagar, Kanpur, Jorhat, Coimbatore, Hyderabad, Udaipur, Varanasi, Srinagar, Meerut, Bhubneshwar, Ludhiana and Dharwad. Dr Paroda served as founder President of Global Forum on Agricultural Research (GFAR) from 1988-2001. He also served for more than two decades as Executive Secretary of Asia-Pacific Association of Agricultural Research Institutions (APAARI), a well known regional organization fostered by him to strengthen regional research collaboration. He had served as Chairman as well as Vice-Chairman of ICRISAT Board, member of Board of Trustees of IRRI, member of WMO High Level Task Force on Climate Services, member of Advisory Council of Australian Center for International Agricultural Research (ACIAR), member of Finance Committee of CGIAR and a member of the Governing Board of the Commonwealth Agriculture Bureau International (CABI). Dr. Paroda has spearheaded the organization of several international conferences and discussion sessions including, International Crop Science Congress (1996), Indian Science Congress (2001), Global Conference on Women in Agriculture (2012), Agricultural Science Congress (1997, 1999), Global Conference for Agricultural Research and Development (2012) and 1st International Agrobiodiversity Congress (2016), Till recently, Dr Paroda worked for the overall benefit of farmers as Chairman, Farmers Commission of Haryana, Chairman of Working Group on Agriculture and member of Rajasthan Planning Board, when State Agriculture Policies both in Haryana and Rajasthan were released. Currently, He is Member of Strategic Impact, Monitoring and Evaluation Committee (SIMEC) of CGIAR. As Chairmen of the Trust for Advancement of Agricultural Sciences (TAAS), his goal is to link science to the society.