# HIGH LEVEL POLICY DIALOGUE ON INVESTMENT IN AGRICULTURAL RESEARCH FOR SUSTAINABLE DEVELOPMENT IN THE ASIA-PACIFIC REGION

# Rama Gardens Hotel, Bangkok, Thailand 8-9 December, 2015

# **CONCEPT NOTE**

# **Organized by**











Asia-Pacific Association of Agricultural Research Institutions (APAARI)
Australian Centre for International Agricultural Research (ACIAR)
Food and Agriculture Organization of the United Nations (FAO-RAP)
Global Forum on Agricultural Research (GFAR)
International Food Policy Research Institute (IFPRI)

#### **CONCEPT NOTE**

#### 1. Preamble

- 1.1 The Asia-Pacific region is home to almost two-third (642 million) of world's hungry and poor (Paroda 2014). In 2011-2013, nearly 1/8<sup>th</sup> population in the region did not have enough food to meet their daily minimum dietary energy needs despite the drop in hunger by 43 per cent since 1990-1992 (FAO 2014). The number of people suffering from hidden hunger (deficiency in micro-nutrients) is approximately 2.0 billion with significant proportion residing in Asia. Prevalence of stunting in 106 million children below the age of 5 in the Asia-Pacific region, being two-third of the developing world total of 162 million, is unacceptably high (UNICEF 2014). Besides, increasing livestock density (0.5 head/hectare in Southeast Asia and >1.4 head/hectare in South and Southwest Asia, in 2011) is mounting pressure on land as well as environment, and extreme weather events, as witnessed in recent years, are becoming more frequent, causing increasing damage to ecosystems, agriculture and human health (FAO 2014).
- 1.2 It has clearly been recognised that food and agriculture sector offers key solutions for the global development (Rio+20), and is central for eradication of hunger, poverty and malnutrition. On the other hand, agriculture is also considered as an economically unstable sector. Enhanced attention to agricultural research for sustainable development is, therefore, necessary to achieve the new Sustainable Development Goals (SDGs) that include *inter alia* attaining food security, improving nutrition, promoting sustainability, restoration of agricultural systems, and combating adverse impacts of climate change. Accordingly, it is critical that we reshape our AR4D agenda now to lay greater emphasis on "innovation" for attaining sustainable agricultural growth and development (GCARD 1 and 2). It is, therefore, necessary that agricultural innovation is clearly defined, understood, further reshaped and out scaled for social inclusiveness. Moreover, it should be especially driven by the needs of smallholder farmers and consumers. Thus, priority-setting for sustainable development must get reoriented towards agricultural innovation for value-chains as well as economic returns from investments.
- 1.3 The Asia-Pacific region is agriculturally most vibrant in the world, covering nearly 70 per cent of the global food and vegetable market and 80 per cent of total aquaculture market (Paroda 2014). The region also produces specialized agricultural commodities [non-food (cotton, jute, etc.) and food (wheat, palm oil, rice, soybean etc.)] of significant market value for international and regional trade. The income, so earned, enables people to buy food and improve their livelihood while reducing poverty and hunger.
- 1.4 It is quite evident now that innovation would require much higher (almost three times) and assured investments to enable the national agricultural research systems (NARS) and the international research programs/platforms to deliver required outcomes. Unfortunately, the magnitude of investments being made in the region is not commensurate with required expectations.

## 2. Rationale

2.1 The Agricultural Science and Technology Indicators (ASTI) program of IFPRI in partnership with APAARI has shown some increases in annual agricultural R&D spending in the region; 3.48 per cent during 1996-2002 and 4.06 per cent during 2002-2008. This, in turn, greatly contributed to economic growth, agricultural development, and poverty reduction in some of

the developing countries (ASTI 2012, ASTI-APAARI 2012). The annual growth, between 1996 and 2008, was differential among different income group countries; being 8.17 per cent in middle income countries, 4.95 per cent in low income countries, and 0.57 per cent in high income countries. Except for China with significantly higher investment (US\$ 4.05 billion in 2008), India with fairly good investment (US\$ 2.12 billion in 2008), and Bangladesh and Vietnam (US\$ 131 and 88 million, respectively in 2008) showing increasing trends; many other developing countries either stagnated (Indonesia, Pakistan, the Philippines, Sri Lanka) or declined (Myanmar, Nepal) in public spending in agricultural research.

- 2.2 It is quite evident that there is wide disparity in investment for agricultural research by various countries. Nearly half of the total public R&D spending in the developing economies during 1996-2007 was accounted for by just three countries; India, China and Brazil. The status of investments by many developing countries is rather quite disappointing. Within the region, only China and India showed a high annual increase of 12 and 9 per cent, respectively (Fan 2013). This obviously needs deeper understanding and critical appraisal.
- 2.3 The World Development Report (2008) has stated that returns from investments in agriculture sector have given much higher dividends compared to similar investments in other sectors in the developing world. This reiterates the need for higher and improved investment. However, such investment trends in the region are disappointing and require critical review. There are meagre allocations of public funds by countries to NARS, relatively less foreign investment and overseas development assistance, and poor funding support by private donors and development agencies. This, however, needs to be systematically assessed and substantiated. Similarly, high payoffs were also shown from investments in agricultural research in Latin America and the Caribbean (LAC), which played a vital role in rural-income generation and natural resource conservation and nutrition. But, the overall funding in LAC region has also decreased in real terms - from 14 per cent of global share in 1981 to 12 per cent in 2000 (ISNAR 1998, ASTI 2009, WB 2014). The investment of 1.14 per cent of agricultural GDP in agricultural research in 2006 in the LAC region, as indicated in the ASTI study was, however, much higher than the corresponding public investments in Africa (0.65) and Asia-Pacific (0.42). Hence, obviously the AR4D allocations need to be enhanced on priority for achieving much needed inclusive growth and development in the region.
- 2.4 CGIAR drive for funding support to international agricultural research met unprecedented success and many visible outcomes in major food commodities. Globally, CGIAR research investment was more than doubled from annual US\$ 450 million until 2009 to US\$ 1.0 billion by 2014. It is projected to be further doubled to US\$ 2.0 billion by 2025. Whereas, IFPRI advocates still higher (3-fold) increase during the same period. With such enhanced investment trends or targets to generate international public goods, investments by developing NARS need to be similarly increased by 2-3 folds to renew efforts for moving forward, engage in translational research, and reshape agricultural innovations for social-inclusiveness.
- 2.5 Investment is critical for outcome-focussed inclusive growth and sustainable development. When global economy suffered shocks in 2007-2008, it became evident that these shocks were absorbed better by those developing countries in the region which had made higher investments in agricultural research (China, India, Malaysia, and Vietnam). Further, the food price spikes of 2008 and 2011 emphasized more on agricultural development as means to alleviate poverty and spur economic growth while ensuring food security. Thus, a much higher urgency is being felt for mobilizing higher and long-term investments. To achieve this, a favourable policy environment needs to be created.

#### 3. Global Efforts for Strengthening AR4D

- 3.1 The World Development Report 2008 revealed that both international and national investments in agricultural R&D had paid off handsomely, showing an average internal rate of return of up to 43 per cent in select World Bank funded projects in developing countries (WDR 2008). It was also shown that public spending on agriculture was the lowest in agriculture-based countries (4% in 2004 in the agriculture-based countries compared to 10% in 1980 in the transforming countries) while their share of agriculture in gross domestic product (GDP) was also high. Broadly, an investment of 2 per cent agricultural GDP on agricultural research for development (AR4D) is advocated. However, there is an underinvestment trend in general and many agriculture-based countries have not reached even one per cent level.
- 3.2 The 'Reform Process', beginning around 2008-2009, had set in motion the discussion on AR4D through GCARD mechanism. Regional organizations, like APAARI, also came up with their own priorities based on need assessments by the member NARS. The "Bangkok Declaration 2009" (APAARI and ADB) attracted specific attention of concerned policy makers and research leaders towards needed support for AR4D. The GCARD road map laid emphasis on smallholder farmers, resource management, enhanced investments, etc. Further, GCARD2 laid emphasis on research and innovation for development (ARI4D). The reform process is being gradually evolved. GFAR envisages beginning of a modulated GCARD3 process in which regional consultations would be needed to feed views on intent, purpose and expected outcomes. Further, the CGIAR research programs (CRPs), based on eco-regional approach, are being taken forward to Phase-II and the strategy and results framework (SRF) is being firmed up to ensure system level outcomes (SLOs). The G20 nations have also focused on AR4D priorities at the same time. The agricultural chief scientists of these countries have desired increased cooperation of national organizations and international institutions, and improved coordination of resources and initiatives for AR4D to consequently increase productivity and improve agricultural sustainability. Similarly, there is an increased emphasis now on the need to enhance the private sector investments, especially for the research and faster adoption. This may further require appropriate policy back up as well as much required decision-making such as: incentives and enabling environment through required joint agreement(s) and initiatives to catalyse public-private co-investments.
- 3.3 The new and likely initiatives include: International Funding Facility for Innovations and Growth to coherently address investment needs of less developed countries. Further, outcome-focussed AR4D investment to provide tangible opportunities for the world's poor is highlighted in GFAR's Medium Term Plan 2013-16. APAARI is also emphasizing on enhanced investments, and to ensure that users of such investments are more accountable to farmers and other grass-root level stakeholders. The Tropical Agricultural Platform (TAP) hosted by FAO is firming up its role in the tropics to help boost agricultural innovation through more efficient and coherent capacity development. Similarly, Gender in Agriculture Partnerships (GAP) will be addressing the gender imperative in food, nutrition and income security.

## 4. The High Level Policy Dialogue

Considering that investments in national and international research programs/platforms in the region need to be enhanced with appropriate policy support, priority setting, and sensitization of members with appropriate success stories of other members and partners as well as scientific evidence brought out by eminent experts, APAARI, with ACIAR, FAO-RAP, GFAR and IFPRI as core partners, has planned to organize a 'High Level Policy Dialogue on Investment in Agricultural Research for Sustainable Development in the Asia-Pacific Region' to provide a neutral platform and explore the possibilities of catalysing the national, regional and

international funding organizations and policy makers to innovatively enhance the financial allocations as well as greater policy support for agricultural research and innovation for development (ARI4D) in the region and to evolve appropriate strategies and a clear road map.

#### 4.1 Goal

To promote investment in agricultural research and innovation for sustainable development through appropriate policies and strategies

# 4.2 Purpose

To catalyse policy/decision makers, re-sensitize NARS, and create an environment for increased resource allocation for agricultural research and innovation for development in the Asia-Pacific Region.

# 4.3 Objectives

- To assess current capacities, disparities and levels of investments in agricultural research and innovation;
- To promote skills and capacity for attracting/mobilizing investments;
- To ensure innovations in funding mechanisms for enhanced investments;
- To build consensus for changed perception of donors and policy makers for longterm funding in agricultural research and innovations for sustainable development.

#### **4.4** Expected Outcomes

- Current capacities, disparities and levels of investments in agricultural research and innovations assessed; forming a basis for decision making to boost the investment levels;
- Engagement in skills and capacity development for attracting investments and mobilizing spending, leading to more refined, competitive and objective proposals for the long-term investments;
- Consensus built on appropriate joint arrangements for public-private coinvestments leading to a new era of collaborative research and innovations;
- Perceptions of donors and policy makers for short, medium and long-term funding in agricultural research and innovations assessed for a way forward;
- The inputs to and outputs from the High Level Policy Dialogue, directly relevant for the proposed GCARD 3 process, will be taken up for needed follow up.

## 4.5 Organizers

- Asia-Pacific Association of Agricultural Research Institutions (APAARI)
- Australian Centre for International Agricultural Research (ACIAR)
- Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO-RAP)
- Global Forum on Agricultural Research (GFAR)
- International Food Policy Research Institute (IFPRI)

#### 4.6 Sponsors

- Syngenta
- Sponsorship is open to all interested Global, Regional and National Development/ Funding Agencies and other Stakeholders in Agricultural Research and Innovation.

#### 4.7 Participants

The participants will include researchers, policy makers, ministers, innovative farmers and representatives of various organizations including NARS institutions, the private sector, CSOs (NGOs, FOs), women and youth representatives, CG international

agricultural research centres and advanced research institutions, non-governmental organizations, foundations and funding/ donor agencies. About 120 participants are expected to attend this High Level Policy Dialogue.

**4.8 Venue:** Rama Gardens Hotel, Bangkok, Thailand

**4.9 Dates:** 8-9 December 2015

#### 4.10 Organization

# I. Advisory Committee

Dr Raj Paroda	APAARI	Chairman
Dr Nick Austin	ACIAR	Member
Mr Konuma Hiroyuki	FAO - RAP	Member
Dr Mark Holderness	GFAR	Member
Dr Shenggen Fan	IFPRI	Member

Dr Raghunath Ghodake APAARI Member Secretary

# **II. Organizing Committee**

Dr Raghunath Ghodake	APAARI	Chairman
Mr David Shearer	ACIAR	Member
Dr Subash Dasgupta	FAO - RAP	Member
Dr Ajit Maru	GFAR	Member
Dr Pramod Joshi	IFPRI	Member
Dr Bhag Mal	APAARI	Member

## 4.11 Key Contacts for the Dialogue

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