Transforming Rural Advisory Services towards Networked Innovations and Process Facilitation

Report of GFRAS East-Asia Regional Network

(by Xiangping Jia, RICKI)
Transforming Rural Advisory Services towards Networked Innovations and Process Facilitation: Report of GFRAS East-Asia Regional Network (RICKI)

Background

Agricultural and rural development demands and depends on innovation, with an effective, pluralistic, demand-driven innovation system in place. By 2050 world population will rise to more than 9 billion, 34 percent higher than it is today. Given this scenario, access to safe and nutritious food will have to increase and food production will have to grow by 70 percent. Achieving this stupendous target is challenging unless the agricultural system and rural institutions are innovatively transformed so as to generate income and defense against hunger (World Bank, 2008). Agricultural innovation systems (AIS) are networks of organizations, enterprises, and individuals that bring new products and new processes together, along with the institutions and policies that affect behavior and performance.

To connect the many networks together for designing innovations, an innovation network or process facilitator is essential (Figure 1). The traditional approaches of mandating transfer of technology through public extension systems are not suitable for promoting innovations. Such a modality and linear mindset lack accountability and ability to fulfill this role (Rivera & Sulaiman, 2009). It has been recognized that institutional failure to respond to farmers’ needs often arises, not as a result of inadequate willingness to interact, but due to a lack of capacities and incentives to network among multiple stakeholders (World Bank, 2012). Broadly speaking, innovation has become a process that needs to be facilitated within an ecosystem that aligns the interests of multiple stakeholders through market mechanisms and then promotes capacity building through a knowledge-based entrepreneur.

Source: Modified from (World Bank, 2012); (GFRAS, 2016).

Figure 1. Agricultural Innovation System and Process Facilitation
In the East Asia region, a broad range of process facilitators (such as *agropolis*, innovation brokering, agribusiness incubation, and agricultural cluster) have been emerging and the transformation has been endorsed by partnering investments between the public and private sector (Klerkx et al., 2009). It is estimated that one-fifth of incubators worldwide are based in Asia with half of them in China; incubation and cluster-based approaches have been widely used in East Asia as an integral part of the development strategy (Ernstberger, 2012; Theus & Zeng, 2012).

According to the Asian Development Bank (ADB, 2008), investments through public-private partnership in developing countries increased by 30% during 1990-2005. New approaches to innovation funding (such as angel investment, seed fund and venture capital) are factoring in agriculture and rural development, although the evidence of impact is absent. Recently, an extension of public-private-producer partnership (4P) has emerged, highlighting the integral role that producer organizations play in agrifood chain and innovations (IDS & IFAD, 2015). The incorporation of the third “P” reflects the recognized importance of farmers’ ownership – either individual or collective – and the nature of demand-driven agricultural innovation.

Recognizing the growing importance of process facilitation and partnering investment between the public and private sector in rural innovations, a new regional network of GFRAS in East Asia was proposed by end of 2016. On **March 1 2017**, the initiative was presented and discussed at the steering committee meeting at IFAD. The majority of the GFRAS steering committee members agreed and supported the initiative, and feedback was delivered to the regional network. To further promote the initiative, two knowledge workshops were planned and organized by the focal point in China in early July, 2017.

**Knowledge Workshops in China**

The first knowledge workshop took place at Yangling (China) on July 3-4, 2017, and the thematic highlights were dryland agriculture and soil degradation (see Appendix of the workshop agenda). Northwest Agriculture & Forest University (NWAFU) is located in the north and central part of China; and the institute’s research is focused on arid and semi-arid agriculture. In the last few decades, the problem of soil salinization in irrigated areas has become severe because of inappropriate water management and insufficient rural advisory services. Central Asia Countries (CAC) are afflicted by similar problems – about 60% of arable land in CAC is affected by medium-level soil salinity problems (ICARDA). China and CAC share many similarities with regard to irrigation and drainage infrastructure, but the two regions are distinctly different where public investment and institutions are concerned (such as decentralized decision-making and market-oriented farm system). Therefore, a comparative analysis of China and CAC will be of great value while advising local and regional leaders on enhancing the capability of natural resources for improved agricultural resilience.

The discussion at the Yangling workshop and continued collaborative efforts between China and CAC will have a great value for GFRAS. Ghassemi et al. (1995) reported annual income losses at the global level from salt-affected irrigated areas as being around US$ 12 billion, based mainly on crop yield losses. They reported 45.4 million ha of irrigated area as salt-
affected, i.e. 20% of the global irrigated area in 1990 (227 million ha). While a vast number of pilot programs have verified the social and economic benefits of improved water management in irrigated areas, lack of knowledge and insufficient capacity of rural advisory services has become major constraints.

(Source: Ram Sharma)

The second knowledge workshop took place at College of Economics & Management, China Agricultural University (CAU, Beijing) during July 5-6, 2017, and the thematic highlight was partnership between public and private sector. During the workshop, the director general of the Department of Sectoral Policy and Law, Ministry of Agriculture (MOA), China, introduced China’s ongoing reforms in public investment in agriculture. The Chinese government has recognized the constraints of government-oriented investment in providing public infrastructure and services (such as farmland fertility, irrigation and drainage, research, and rural advisory services). To introduce external finance and knowledge, equity investment from venture capital and PPP are encouraged. In March 2016, together with several other ministries, the Ministry of Finance (MOF), China, established the national PPP fund and the size of the fund is about USD 30 billion. In June 2017, one month before the GFRAS Beijing workshop, MOF and MOA issued guidelines for implementing the PPP program in agricultural sectors; agricultural sustainability, territorial approaches (such as agricultural parks and clusters), and digital tools were highlighted.
The second part of the GFRAS Beijing Workshop was moved to Tencent WeStart (Beijing). The thematic highlight was emerging venture capital in China’s agriculture and food economy. The focal contact of the GFRAS EA network in China, Dr. Xiangping Jia, made a presentation on the development of a venture capital industry in China and its presence in agriculture. It was estimated that, in 2016, the total amount of VC investment in agriculture was USD 2.1 billion, accounting for one-tenth of the entire local VC investment in that year. The presence of angel investment in agricultural start-ups is interesting – above 45% of agricultural VC investment was delivered at Pre-A stage in 2014 and 2015.

(Tencent (Tengxun) is one of the largest internet companies in China and is offering well-known instant messenger (Tencent QQ) and social mobile application (WeChat). WeChat has become the most popular social mobile application in China and some overseas communities. Tencent has been credited as one of the world’s most innovative companies by numerous media and firms, such as Boston Consulting Group, rising rapidly in its Innovative Rankings. Tencent WeStart is a partnering project between Tencent, venture capital investors, and local government to create an ecosystem for entrepreneurship and innovations in China.)

Agricultural VC in China (2010-2016)

(Source: Xiangping Jia)
After the introduction of China’s VC industry and its presence in agriculture, three high-growth entrepreneurial projects were introduced by the CEOs. “Balcony Farm” provides urban consumers products and services for harvesting green vegetables grown on balconies; the project also offers educational services to children in elementary schools. The company, “Innovation Farms”, focuses on advisory services offered to small- and medium dairy farms through a developed smart-phone application and Intelligent Dairy Farming Platform (IDFP). After working with more than 240 dairy farms in 12 provinces in China, the company developed the capability of delivering big-data-based services. “King Weather (Beijing)” provides rural communities and insurance companies with weather forecasts and evaluation on the basis of time-series agri-meteorological data (one kilometer x one kilometer). All three entrepreneurial start-ups were presented at the Beijing workshop and received angel investment, and are featured as emerging ICT and e-commerce enterprises.

(Source: Xiangping Jia)

(Source: Xiangyang Cheng)
Strengthening the EA Regional Network through RICKI

Through the knowledge workshops and other communication, GFRAS and members of the EA regional network arrived at a consensus that a new title was needed to highlight the transformative RAS in the region with regard to networked knowledge and resources. Attributing to comments from Yongsup Song, Karim Hussein and Xiangping Jia, the title “Rural Innovation Centre for Knowledge and Investment” was proposed, with the acronym of RICKI.

The secretariat of RICKI is temporarily situated at Tencent WeStart (Beijing), where hundreds of local young entrepreneurs and start-ups are networked with top venture capital investors. RICKI partners with INNO Angel Fund, a prominent angel investment company that has, since 2013, managed 350 million USD and invested in more than 200 startup programs. INNO Angel Fund has a genetic bond with Tsinghua University, an internationally renowned research and education institution, and highlights technological and business innovations involving the Technology, Media & Telecommunications industry (TMT).
(Source: Huaiyu Liu, CEO of INNO & Tencent WeStart (Beijing)

(RICKI carries forward the vision of GFRAS in the region and takes actions to strengthen the capacities of rural advisory services so as to effectively contribute to agricultural innovation systems for sustainable development. The mission is to provide advocacy and leadership on pluralistic and demand-driven rural advisory services for sustainable development.

RICKI follows and incorporates the three levels of capacity development as illustrated in the GFRAS Strategic Framework 2016-2025. It incorporates enabling environment capacities, institutional and organizational capacities, and individual capacities.
The guiding principles define how and with whom RICKI works. These principles are also reflected in all activities and it is the foundation on which the strategic framework is built.

- **Demand-driven and accountable**: RICKI promotes advisory services that are driven by, and accountable to, the clients of rural advisory services. Processes and initiatives are led by relevant lower-level actors under RICKI’s guidance and support, when needed.

- **Pluralism, partnership and alignment**: Working with a wide range of actors in the innovation system strengthens the forum through synergies, and creates efficiency and joint ownership. RICKI also facilitates harmonization and coordination to synergize the work of various actors. RICKI’s work is based on strategies aligned with wider efforts among international development institutions and their policies and programs.

- **Monitoring, evaluation, and learning with evidence-based approaches**: RICKI focuses on evidence-based measures and approaches. Enhanced learning is a core element of RICKI, and it has a monitoring and evaluation framework for this purpose. It also works towards, and promotes, better monitoring, evaluation, and learning within all activities related to advisory services.

- **Transparency**: RICKI is governed, and its activities implemented, in a transparent and inclusive way, respecting the opinions and approaches of all actors involved. All created information is shared in the public domain.

The organizational structure of RICKI is anything but hierarchical. RICKI highlights and values decentralized decision-making and autonomy of members in the region. The focal persons in the region meet annually at different places to review regional initiatives and to discuss planned and emerging issues. While RICKI welcomes multiple focal points in one country for
large impact at the local level, at the starting stage, RICKI identifies SDC Green Gold (Mongolia), and Rural Development Administration (Korea) as the focal points at the country level.\(^2\)

![Organizational Structure of RICKI: Non-hierarchy and Alliance](image)

(Source: Xiangping Jia)

References


\(^2\) Due to personal reasons, the focal point in Japan was absent at the Beijing Workshop.